TWO

Practical Lectures

ON THE

USE OF THE OPHTHALMOSCOPE.

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LECTURE I.

GENTLEMEN,—The use of the little instrument that I hold up before you becomes every year more important to practitioners in every department of the healing art; and there is too much reason to believe that familiarity with it has been retarded, rather than promoted, by very much that has been written upon the subject. The ophthalmoscope, like every other optical instrument, owes its powers to the practical application of optical principles; and, while the invention was comparatively new, it was not unnatural that these principles should be brought into prominence by authors. It so happened, moreover, that they were derived from a science that has not hitherto been regarded as a necessary part of medical education, and that they were expressed in phrases foreign to medical parlance. Students and practitioners not uncommonly recoiled from pages that bristled with equations and were adorned by mathematical diagrams, and gained from them nothing but the belief that new forms of thought must be mastered before the ophthalmoscope could be profitably employed. This belief is a pure and absolute delusion. To see with the ophthalmoscope is an art so easy and simple that any intelligent child of ten years old would acquire it by the aid of half-an-hour's instruction; and to interpret the appearances seen requires a knowledge of anatomy and of pathology rather than of optics. A few questions will now and then present themselves, chiefly with reference to the relation of real to apparent magnitude, which a knowledge of certain of the elementary laws of optics suffices to resolve as they arise; but even these may be resolved, perhaps with a little more trouble, by other methods. An acquaintance with the principles which underlie the instrument is no more essential to the use of the ophthalmoscope than it is to the use of the microscope.

And here I would guard myself against being misunderstood, or against any suspicion of being supposed to underrate the value of the knowledge that I still tell you may be done without. I am a very earnest advocate for a far higher standard of preliminary education for the medical profession than any that has yet been put forward by authority; and I hold that some real comprehension of the elements of mathematics is absolutely necessary for those whose business it will be to track truth through the mazes of natural phenomena. I hold that the man who has mastered, and thoroughly understands, even the Pons Asinorum, is for most purposes equal to two men of similar capacity who have never undergone that mental discipline. The former has enjoyed an experience of absolute verity which, small though it be, should render him antagonistic to error; and an experience of perfect demonstration which should protect him from becoming a slave to fallacies. But this value of mathematics is wholly general, and rests upon its influence as a fertiliser and stimulant of the mind—not upon its immediate practical applicability to some inquiry that is in hand. Viewed in the latter light alone, I should regard it as wellnigh useless, and should regret to see time withdrawn from strictly professional studies for its sake. I would by every means in my power urge those who destine their sons for the medical profession to consider the study of mathematics an essential preliminary; but at the same time I tell you, as a simple fact, that you may become expert ophthalmoscopists by the aid of eyes and common sense alone. Upon this basis, and upon this only, I propose to build up my instructions.

We see anything, no matter what, by virtue of the light proceeding from it, and the light that proceeds from an eye is so refracted by its humours that it proceeds direct to the point at which the eye is looking, and does not spread itself out laterally. If we place a lamp in front of an eye that we wish to look at, we cannot see its interior, because we must either go beyond the lamp, so that the flame forms an intervening object, or between the flame and the eye, so that we intercept the light. It is necessary to put the lamp at the side of the patient's head, and to turn the light from this lateral source into the eye by a mirror. We then make a hole in the mirror, and through this hole we receive the light that returns from the interior of the organ. A mirror with a hole in it is the only essential feature of an ophthalmoscope; and its use is to enable us to light up an eye, and to receive the returning rays, without impediment from the intervention of the flame, or from the opacity of the cranium of the observer.

In dealing with a complex instrument it is always the wisest and quickest course first to attain the mastery of its essential part, and to add the other parts by degrees. If you take up a complete ophthalmoscope, and begin by trying to examine an eye, you will only disappoint yourselves, and weary your patient. Your first care should be to know exactly what you have to do with the mirror, and how to do it.

You have, in the first place, to light up the interior of the eye, next to see the illumination through the hole in the mirror, and lastly to acquire the art of moving your own head to and fro, now nearer to the patient, now farther from him, without allowing the light to wander from the track in which it was originally directed. You may acquire all this perfectly without using an eye as your object at all.

I think the best plan is to take a piece of white paper, make a spot or mark upon it about as large as a dilated pupil, and place it before you in an upright position, with the spot level with and exactly opposite your right eye. Then place a lamp, with its flame at the same level, a little to the right of the paper, and a little behind it, so that the spot will be in shadow. Next, take the ophthalmoscope mirror, place its upper margin against that of the right orbit, with the handle directed vertically downwards against the cheek, and held tightly between the finger and thumb of the right hand. Look through the hole, and observe where the reflection of the mirror is thrown, and then so manœuvre the latter as to bring this reflection upon the spot, which should be seen brightly illuminated. Retaining the mirror in the same position, draw the head an inch or two backwards. As this is done the illumination will leave the spot, and may be brought back to it again by the slightest possible rotation of the vertical handle of the mirror. If the illumination wander to the left, the rotation must bring the left edge of the mirror forwards, and *vice versâ*. If the illumination wander upwards or downwards, the mirror must be made to rotate also on its horizontal axis, and five minutes thus employed will give the knack of bringing back the light to the desired point. This gained, the next step is to make the rotation of the mirror coincident with the to-and-fro movement of the head, instead of subsequent to it, so that the light shall never leave the spot at all. The head must first be moved backwards or forwards very slowly, until the hand and eye learn to appreciate the exact degree of rotation that is required, and then the pace must be increased. The object is to learn to move the head quickly to and fro over several inches without letting the reflected light ever depart from the spot to be illuminated. Care must be taken never to move the head laterally, because you must be exactly opposite an eye in order to see into it.

When thus much is accomplished, when you have learnt to illuminate the spot continuously, from different distances, from the right side, the lamp should be moved to the left, and the practice repeated, and the left eye should also be employed for both kinds of illumination.

The next step is to take in the disengaged hand one of the larger lenses of the ophthalmoscope case, and to place it between the mirror and the paper, at a distance of two or three inches from the latter, so as to look at the spot through this lens, as well as through the hole, without disturbing the illumination. A few trials will render the lens hand and the mirror hand independent of each other, so that the lens can be interposed or withdrawn, moved nearer to the paper or farther from it, without the mirror being

disturbed, and so that the head and mirror can be moved forwards or backwards, while the position of the lens remains unchanged. When this knack has been attained, the whole art of ophthalmoscopy is acquired.

In order to carry it into actual practice, you seat yourself opposite the patient—your eyes on the same level with his, and the eye which you are going to employ exactly in front of that which you are going to examine. The light must be at the side of the patient's head, and a little behind it; and, for early trials, the pupil of the eye to be examined should be dilated by atropine, although practice will soon render this unnecessary. You then treat this eye like the spot on the paper—that is, you illuminate the pupil with the mirror, and look at it through the hole. You will see it return an uniform reddish or whitish glow, sometimes diversified by visible vessels. You next interpose the convex lens, holding it about two or three inches from the eye under examination, and you will perhaps immediately see the details of the *fundus oculi* sharply defined. If you do not, if you still see only the reddish glow, you are either too near the eye or too distant from it, probably the former. You move your head steadily back, preserving the illumination, until vessels come *clearly and sharply* into view. As long as you have the red glow, a clearly defined image is only a question of distance, like that of drawing out the tube of a telescope, and may always be attained with perfect certainty. Let us see why this is so.

If you hold up your ophthalmoscope lens, at a distance of about 18 in. from your eye, and look through it at any distant object, you will see an inverted image of that object. The image appears to you to be painted on the lens, but it is really suspended in the air, nearer to you than the lens by the focal length of the latter. You can test this by a simple experiment. Take a printed page, move it slowly towards one eye, the other being closed, until the letters begin to be indistinct. Measure the distance between the eye and the page at which this indistinctness commences, and let us suppose that it is 8 inches. Then get the inverted image again, move the lens slowly towards the eye, and measure the distance between the two at which the image begins to be indistinct. This distance will be 8 in., *plus* the focal length of the lens. If it be a 2-in. lens, the distance will be 10 in.; if a 3-in., 11 in.,—thus showing that the inverted image advances in front of the lens, and comes to within 8 in. of the eye, while the lens is still at a greater distance away.

Now, that which we see with the ophthalmoscope, when the lens is interposed and the right distance attained, is an inverted image of the parts at the back of the eyeball; and this image is nearer to us than the lens by the focal length of the latter. Suppose the lens is of two inches focal length, and is held three inches from the eye of the patient, then the image will be five inches from the patient. If the observer has eight inches as his nearest distance for clear vision, his eye must be *at least* that distance from the image, or thirteen inches from the patient, in order to get definition; and so long as the two faces are only a foot apart, the observer will see nothing but muddle and obscurity.

This, then, is the whole art of seeing with the opthalmoscope. You have only to learn to keep your seeing eye exactly opposite that of the patient, and to maintain your illumination while you vary your distance, in order to obtain as clear an image of the details of the fundus oculi as a telescope will give you of the details of a landscape.

Ophthalmoscopes, as commonly sold, are packed in cases which contain two large lenses and five small ones; and there is a little spring clip behind the mirror, in which any one of the small lenses may be placed. I proceed to consider the uses of these several parts.

The two large lenses are both convex, but of different powers. One of them is usually of two inches focal length, the other of three. The lens of shorter focal length is the more powerful magnifier, as may be ascertained instantly by trial. But the more powerful the magnifier, when used in the ordinary way, the smaller will be the *inverted* image that it yields, which also may be tested in a moment on any distant object, and hence the 3-in. lens will afford a larger image than the 2-in. The 2-in. lens, on the other hand, will show more of the fundus oculi at one view; so that we often use it for a general inspection, and then take the 3-in. for the more accurate examination of some point of detail. The power to increase enlargement by weakening the lens is, however, limited, and that for two reasons. In the first place, as the illumination remains the same, the light which is sufficient to form a bright small image is no longer enough when the image is spread over a larger surface. In the next place, the image must be kept at least eight or ten inches from the eye of the observer, and must not, therefore, be very far distant from that of the patient. It is desirable to rest the hand that holds the lens on the patient's cheek, forehead, or orbital margin, in order to secure steadiness, and hence the faces can only be at arm's length apart.

Of the five small lenses, one is convex, usually of 10 in. or 12 in. focal length. This serves to magnify the inverted image, exactly as the eyepiece of a microscope magnifies the image produced by the objective. We may therefore call the large lens the object-glass, and the small lens the eye-glass, of the ophthalmoscope. The other four small lenses are concave, and to these we shall return presently. They are intended for a different method of examination.

Before proceeding to describe this method, I would say that I think the concave lenses usually supplied are insufficient for the purposes of careful and minute examination, because they do not afford sufficient enlargement. I carry in my case two object-glasses, one of 2 in. focal length, the other of 3½ in.; and two eye-glasses, one of 12 in., and the other of 7 in. The 2-in. object-glass with the 12-in. ocular gives a good general view of the fundus; but the 3½-in. with the 7-in. affords very great enlargement of details, and reveals pathological changes that could not have been discovered without its aid; while the four possible combinations enable us to subject any particular morbid change to four successive degrees of enlargement, a mode of examination that is often of great value in clearing up some doubtful point.

If now we lay the lenses aside, and, taking the mirror only, come quite close to the patient, so as to bring our eye within one or two inches of his, we shall find a distance at which, if he is not short-sighted, we can quite clearly see the details of the fundus, no longer inverted, but in their natural position, and highly magnified by the crystalline lens of the examined eye itself. This is called the "direct" method of examination, and it is extremely valuable as a check to the appearances presented by the inverted image. It is attended by the objection that the close approximation of faces is not always desirable. If the patient be short-sighted, we shall see nothing without the interposition of a concave lens, and the four small ones already referred to are provided to meet this contingency. As ophthalmoscope mirrors are commonly made with a moderately large perforation, the direct method requires an artificially dilated pupil; but I am indebted to Dr. Liebreich for the knowledge that, by diminishing the size of the mirror perforation, we may always see directly through an undilated pupil; and I now almost invariably combine both methods of examination. In order to do so, without the use of atropine, it is desirable to have not only a very small perforation, but also a very small mirror, so that the reflection from it should not be large enough to extend beyond the corneal margin. The light that falls beyond the margin of the pupil is useless for purposes of observation, but all that falls beyond the cornea is injurious. The iris may be regarded as being absolutely opaque; but the sclerotic is translucent, and a strong light falling upon it enters the eye, and produces contraction of the pupil. When the mirror is very close, the size of the reflection from it depends mainly upon the size of its surface; and, for the direct method, a mirror as large as a silver threepenny-piece is sufficient, with a perforation that should scarcely exceed one millimetre in diameter. For the inverted image, however, it is well to collect the light from a rather larger surface; and a mirror the size of a shilling leaves little to be desired for both purposes, if only its perforation be small enough. It may be mounted on a handle an inch and a half long, and carried, with its four lenses, in a little purse three inches long by an inch and a half wide. Such an instrument may be obtained from Messrs. Weiss and Son, and forms a complete ophthalmoscopic equipment in the most compact and useful form. The concave lenses, for obtaining the direct image from short-sighted eyes, may be regarded as superfluous, since such eyes may be examined by the more ordinary method. If, however, the observer is

himself short-sighted, and desires to employ the direct method, he must be supplied with that concave ocular which will precisely neutralise his own defect.

Before I leave the subject of the mere management of the instrument, and proceed to describe what it reveals, I ought to mention that the object-lens should always be held a little obliquely. If it be perpendicular to the course of the light, it will return a reflected image of the mirror from each surface. By giving it a slight obliquity, these reflected images will be moved in opposite directions, and the details of the fundus will be seen between them.

ON THE DIFFUSION OF SCARLET FEVER, AND ITS ARREST.

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THE alarmingly increasing proportions which scarlet fever is assuming in this country not only, I venture to think, justifies, but imperatively calls for, the relation of any facts which may even remotely tend to fix attention upon the numerous channels of its communication, or may give rise to suggestions respecting means for its abatement. I trust that the following facts which I shall record, all of which have more or less directly come within my personal knowledge, may be considered pertinent. The first two cases go far to show how people may be fully alive to the necessity of taking all precautions in preventing infection, and yet use means which are inadequate.

A short time ago I was asked to visit a girl aged about fifteen who was dying of scarlet fever. Upon inquiry her history proved to be as follows. She was the surviving sister of four brothers and sisters, all of whom had died of scarlet fever three months previously in the same house wherein she was lying. On the occasion of their death, it appears that the father and mother—very well-to-do people—had taken all the means they could think of for purifying the house: the furniture had all been scrubbed and cleaned with carbolic-acid solution, and the bedding and clothing of all kinds properly cleansed; the walls stripped, re-covered, and painted, &c. The parents left the house empty, and went with their only girl to Brighton for ten weeks, partly with a view to prevent subsequent infection, and partly out of a natural dislike to return too soon to the scene of so much disaster and unhappiness. They then returned home, and in rather more than a fortnight the remaining child sickened with scarlet fever, and the attack was so rapid and severe that she succumbed in spite of all assistance. On examining into the precautions taken to prevent such infection as had occurred, we could not for some time comprehend how this girl could have taken the disease, until we found out that, in the universal cleansing, two large old-fashioned arm-chairs existed in the sick room with hair cushions and backs, the outer coverings of which were much tattered, allowing the hair to protrude in various places; and these cushions had, by some oversight, not been emptied and replenished. Thus there seemed every probability that the loose hair hanging from these dilapidated cushions and floating about had been the nidus for the spread of infection.

In the second case of oversight as to preventive measures which not long since came under my notice, all care during convalescence was supposed to have been taken, when, after an interval, the disease again appeared, apparently in consequence of a *single* article of clothing which had been left hidden in a drawer that had not been cleaned out.

The following cases show how egregiously careless people are apt to be in this matter of infection, as if recklessly ignoring its existence. A little child is now under my care at St. George's Hospital who was admitted with dropsy of the whole body, and acute inflammation of the kidneys, passing a large amount of blood from those organs. It proved, on inquiry, that she had been ill a month of scarlet fever, and that until this bloody urine came on she had actually been allowed to go day by day to school, throughout the extremely cold and foggy weather which we have been having, and permitted to mix with her fellow school children, not being kept at home a single day throughout the course of the fever and the peeling of the skin which followed; the friends and schoolmistress considering it only a case of scarlatina, and, as the mother said, "*not worse than a cold.*"*

This very day, again, I have investigated the case of a boy who caught scarlet fever under the following circumstances:—He was living as servant in a respectable family, several members of which had scarlet fever. He was himself taken ill, and for an entire week, whilst ill and vomiting from time to time, was kept daily at his work, cleaning boots and shoes, scrubbing the outside steps in this inclement weather; his friends, who lived near, not being communicated with until he was sent home prostrate to his mother, in a state of delirium, which has now been going on for four days.

I may here mention that I have known a case of scarlet fever in which the infection appeared undoubtedly transmitted in some small woollen patterns sent by post from an infected family; and within the last month a lady told me that a poor woman in her neighbourhood recently received a letter which had been allowed to be written and forwarded by a friend suffering at the time from small-pox in one of our public institutions. A short time ago a lady informed me that she had been calling with one of her children upon another lady, was shown into her room, and after half an hour's conversation the lady said: "By-the-bye, perhaps I ought to have asked the servant to have told you that our children have scarlet fever, as you might not like to stop very long." The little patients were in the adjoining room behind the folding doors all the time. I need not say that the morning visit was not prolonged.

Some facts have recently been recorded tending to show that the laundry may be the agency of infection, the clothes of the sick being washed at the same time and in the same tubs as those of other people. Of course under any circumstances this ought not to be; but I would suggest that, even should this promiscuous washing occur, if the suspected clothes were well boiled—i. e., submitted to the temperature of 212° (even if they had not been immersed in some suitable disinfectant, as assuredly such clothes should always be, before removal from the bed room), all chance of infection would be destroyed.

But there is another way in which newly-washed clothes may become a means of propagation of scarlet fever and other like diseases, and that is by their being dried and "aired" (as they must needs be very frequently in large towns) in the rooms of washerwomen. Dr. R. Thompson, of the Brompton Hospital, informs me that he has himself seen a young man covered with the eruption of small-pox in a room, from the ceiling of which several articles of clothing which had just been washed were suspended in the drying process.

But perhaps one of the saddest modes of contracting infection is when people go in search of health to some seaside or watering-place, and are plunged in an atmosphere of infection by lodging in houses or rooms inhabited but recently by fever-stricken patients, and not yet duly purified. In many instances it is possible that the lodging-house keepers may be ignorant of the gravity of the matter, and think that their slender efforts, consisting of the use of a little whitewash and soap, are all-sufficient for thorough disinfection. But whatever may be the explanation in some cases, I have known of several well-marked outbreaks of scarlet fever contracted by lodging in apartments lately tenanted by sufferers from that affection.

The following case, for which my informant, a practical and intelligent gentleman, vouches, is a most painful example of culpable acquisitiveness, which might have led to important consequences. A person went to a watering-place two summers ago, intending to procure lodgings. The place was crowded, and after difficulty he found one house where he was told he could have accommodation, but that he must wait until evening, as the "party" occupying the rooms was going out, but could not leave until late in the

* I am fully persuaded that much harm is done by the use of the word scarlatina. Among the public many suppose it stands for quite a different disease from the infectious scarlet fever; others think it at any rate imports a very mild and innocuous variety of the disease. Thus are they led to be wanting in care towards those suffering from the disease. Even medical men unwittingly lend themselves to this fallacy very often, by using the word in relation to slighter cases, with the view of allaying apprehensions on the part of friends.

afternoon. Pleased to make this arrangement, he sauntered out, and accidentally met a friend who was staying in the place, and to whom he related his good fortune. His friend inquiring as to the house where he had secured lodgings, at once recognised it as one said to contain inmates dangerously ill with scarlet fever. This statement of course led to further investigation, and it turned out indeed that so it was; and that, moreover, the "party" described as being about to vacate for the new-comer was no other than a dead man who was to be carried forth to his burial, a victim to the fever.

The same gentleman, this year, being at the seaside, was strolling out with his landlord, when he directed his attention to a house where several lodgers lay ill with scarlet fever. They were, however, convalescent, and about to remove. When asked by my friend how long it would require to make the lodgings again habitable, he told him they would all be ready for new visitors in twenty-four hours. "But," said my friend, "can the medical man in attendance allow that?" The reply was, "Ah, that is his business, not mine. Besides, to whom could he apply on the matter?"

The facts I have briefly related above—and I could recount others of a like kind, did space permit—speak for themselves; and, being simply such as the experience of daily medical life has casually afforded, I doubt not that, if anything like strict inquiry were made, every medical man would be able to supply numerous instances of an equally instructive and painful character.

If this be so, and if in every town and village the same culpable negligence is being constantly repeated, how readily may we account for the overpowering vigour which this plague appears to have acquired in our country, and for the increase of area which it seems to cover, no Phinehas standing up to stay its progress. It must be borne in mind that the strength and virulence of the disease must be estimated not merely from the number of deaths reported by our registrars, but also from the dropsies, the affections of the kidneys and of the glandular system, the permanent shattering of the general constitution, and the proclivity to numerous secondary disorders, entailed by the disease.

It appears necessary that the public should recognise, and realise more strongly and definitely, the various channels by which the disease appears to be communicated; and if it is to be arrested, or even checked, with anything like an approach to completeness, some species of "stamping out" must be resorted to, and measures as stringent as the liberty of the subject will permit to be entertained must be devised by the powers that be, for the protection of the public. I would therefore venture to make the following suggestions:—

1. That it should be rendered compulsory for every householder or medical man to make a report of every case of contagious disease to some recognised authority—either to the ordinary medical inspector of health, if such exists in the district, or to some medical man who should be appointed inspector for the purpose. This should be done, of course, whether the case be among the rich or the poor.

2. That, acting on this information, the duty of the inspector should be to enforce a system or code of proper precautionary measures for the avoidance of the extension of the disease (the details of such a system to be approved by the Medical Department of the Privy Council). Where money and appliances existed, the precautionary scheme would readily and quickly be carried out by friends; but when cases occurred either in the upper or middle classes, in families whose household arrangements are such as not to permit of its execution, but who are able to pay for care and medical attention, then the patients should be removed to "retreats." Hence I would suggest—

3. That proper "retreats" or "sanatoria" should be provided in some convenient place outside the town, properly segregated, and surrounded by open ground or gardens, probably worked by private speculation (and a very lucrative one I believe this would be to such medical men as would undertake them), but under the general watching of the before-named inspector. Patients in such sanatoria should of course be attended, if required, by their own medical men, but in very many instances most probably families would be content with the services of the resident medical attendants. For the indigent, the hospitals or infirmaries provided by the Poor-law Board would be the proper receptacles; and parishes and unions would seem to have as much need of sanatoria for scarlet fever (and that a tolerably constant one) as lately they had for relapsing fever.*

4. I would suggest that scarlet fever cases should not be capable of admission into any of our general hospitals (any more than small-pox) until the desquamating stage is past; unless provision be made for their isolation in some part of the building devoted to their reception, and provided with all appliances requisite for the treatment of such cases, for which special nurses should exist, having as little communication as possible with the institution at large. I make this suggestion by reason of the frequent communication which occurs in our hospitals of the disease from scarlet fever patients to their neighbours, *even to surgical patients*, which sometimes proves fatal; also on account of the danger of infection which is incurred by the great number of promiscuous visitors, often young children, who come daily into our hospital wards, and hang about the beds of patients, whom they play with and amuse, handling their books and clothing, pocket-handkerchiefs, toys, &c. And this danger is not confined to the visitors, but extends to *their* families at home, to whom they may undoubtedly, by means of fomites, transfer infection, without themselves being the subjects of the disease.

I have satisfactory reason for saying that patients free from scarlet fever in our hospitals may, by exposure to the poison in the wards, carry it out with them, and subsequently die of it; although they may themselves leave the hospital apparently in perfect health. I have personal knowledge of such a case.

I have above alluded to the culpability of lodging-house keepers admitting families into apartments without informing them that cases of infectious disease had lately inhabited them. I would conclude by suggesting the importance of our having positive knowledge as to what the law says on that point. Are such people generally amenable to law for such conduct? Is it penal?—or does it only come within the law in certain localities, according to the working of certain Health Acts? I cannot help thinking that a full statement and understanding of the law on this point would be of great service to the profession and to the public.

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INDIAN BOILS; THEIR VARIETIES AND TREATMENT.

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(*Concluded from p. 813.*)

DELHI BOILS, like their congeners the Gwalior ulcer and Scinde boil, derive their name from the locality in which they are endemic, although by the natives they are frequently called "Aurungezebe," on account of the Emperor of Delhi of that name having suffered from them. When it is remembered that there are numerous instances on record where whole regiments, both European and native, have been totally disabled for all military duties, together with the fact that the practice or treatment adopted has either been only partially narrated, or at least is only to be found scattered among Indian publications, many of which had a mere ephemeral existence, a consideration of the subject—the causes, diagnosis, and treatment—will not be altogether profitless, and possibly may attract the attention of practitioners who intend to follow an Indian career.

By some the Delhi boil is spoken of as an "ulcer." This is hardly precise, inasmuch as the ulcerative stage is simply the result of the unchecked inflammatory one. The characteristics of the Delhi boil are as follows; and, *en parenthèse*, I venture to believe the description to be truthful, inasmuch as I myself have been a great sufferer from them in 1864 and 1865, during my residence at Delhi and its neighbourhood.

In the first stage the Delhi boil is nothing more than a

* Such sanatoria are found most useful in the case of our large public schools. Why should not our universities also possess them? It has, however, lately at Oxford been made compulsory for lodging-house keepers to "declare" any cases of infectious disease which occur in their lodgings.

small, hard, red, shining pimple, having the appearance as if the skin had been bitten by a mosquito, and from this cause is named the "mosquito stage"; and it will be shown, when speaking of the treatment, that the early recognition of this stage is important, as affecting the rapid cure. The "mosquito stage" may last for a variable period, without any change other than a slight increase in size. The tumour is hard, circumscribed, and well defined, and on pressure gives you the idea of a pea or a duck-shot rolling under the finger; and this mobility especially marks the first stage of development of the boil. In other words, it is the clearest proof that the ulcerative or second stage has not yet commenced.

The setting in of the ulcerative stage is variously stated by different writers. I have generally noticed that about the end of the fourth week the pimple has become considerably enlarged, and that it no longer rolls under the finger. Soon after the surrounding skin becomes infiltrated, and the surface of the tumour rough and scaly. The ulcerative stage has now fairly set in; the tumour day by day becomes more elevated and vascular, and spreads wider and deeper into the surrounding tissues, together with a sensation of pricking and itching. On attaining its full size one or more vesicles form on the apex of the tumour, which now begins to discharge a pale-yellowish sero-granular fluid. The ulceration goes on spreading until the whole boil, with the exception of the base—described by Indian writers as resembling a "collar of brawn"—is destroyed. A deep, ragged ulcer, of variable size, with thickened and irregular edges, follows; there is a sero-purulent discharge; the ulceration spreads and burrows; the surrounding skin has a livid appearance, and a fungus-like sore is left, of a most intractable nature. Large portions of the skin are often destroyed; an unsightly scar is not unfrequently left; and if these boils appear on the face they leave great disfigurement, though in a lesser degree than the Scinde boil.

The diagnosis of these boils is, as a rule, easy. From ordinary or "mangoe" boils they would be at once known by the district in which they occur, and the symptoms just mentioned. The Delhi boil, moreover, in its early stage, has a tendency to spread slowly from centre to circumference. Ultimately, however, such growth becomes paralysed, and the ulcer remains stationary, as in the ordinary indolent ulcer. Other persons being similarly affected—the irregular and notched-like margin—the fungus-like appearance of the sore—the cicatrix of variable colour, sunk below the level of the skin, and giving you the idea as if a piece of flesh had been cut out, while the skin of it is tolerably thick, with little or no tendency to re-open,—are symptoms sufficiently *pronounc'd* to prevent the Delhi boil from being mistaken for any other Indian boil. Sometimes, however, it is exceedingly difficult to distinguish it from a syphilitic ulcer; and writers, so far as I know, have not drawn attention to this at all. The importance of it cannot be overrated; while the early detection of the syphilitic poison will not only modify our practice, but facilitate the cure.

In the syphilitic ulcer—and I am taking as my exemplar a private in a European regiment,—there is the history of the case; the peculiar syphilitic cachexy; the nutritive and reparative functions much interfered with; the severe nocturnal pain, differing *in toto* from the sharp lancinating pain which sometimes attacks Delhi boils in paroxysms. The syphilitic sore is circular in shape; the edges elevated; has a foul greyish surface, and the cicatrices bluish or brown in colour; thin, smooth, and apt to break open again.

Having, therefore, briefly enumerated and contrasted the symptoms characteristic of the Delhi boil and syphilitic ulcer, we have now, as a natural corollary, to consider how far the Delhi boil is modified by the presence of the syphilitic poison. In the cases which have come under my own observation, I have found that when the Delhi boil is contaminated by syphilitic poison, the ulceration is surrounded with a slight coppery margin. At the base you have a shreddy mass of areolar tissue rather than "a collar of brawn"; the edges of the ulcer are more irregular, crenated rather than notched; the sore is less deep; together with the presence of the more marked symptoms which constitute the syphilitic diathesis. Some few cases I have met of Delhi boils tainted with syphilis, which have a tendency to imbed themselves between the muscular fibres and tendons, especially on the forearm and leg, and remain dormant for six or seven weeks before the ulcerative stage sets in. These ulcers frequently assume a gelatinous or gummy appearance, are most intractable, and likely to leave the greatest disfigurement, and a form that, above all, requires change of air to England. The seat of Delhi boils is supposed to be in the follicles rather than in the sweat-glands, and the places in which I have noticed Delhi boils most frequently to appear are the forearm, wrist, buttocks, legs, elbows, hands, feet, and rarely on the face.

Writers are much divided in their opinions as to the causes or origin of Delhi boils. The majority or older writers were inclined to the opinion that it was due to malaria. Later observers have attributed it to the well-water, which the troops more especially were in the habit of drinking; and point, in evidence of the truth of their observation, to the fact that the natives who draw their water from the Jumna are never attacked with boils. But some writers discard the idea altogether that malaria is the cause, or that the disease is in any way constitutional; and believe that it is traceable to the existence of a microscopic germ which is found to exist in the yellow matter or bodies on the top of the boil, corresponding to the ova existing in foul water, and that the disease is strictly local.

My own idea has always been that malaria plays an important part in the production of boils. First, there is the season of the year; for though boils prevail endemically in Delhi, it is in the "drying-up season"—i. e., soon after the rains—that they prevail as an epidemic. They are not unfrequently ushered in by slight remittent fever—the ephemeral form, which so commonly attacks the newly-arrived European in the months of October and November. Again, you have the neuralgic form of pain accompanying them; and, lastly, their total disappearance on removal to another climate, as was the case in 1864, when the regiments were moved from Delhi to Cawnpore and elsewhere. All these facts, in my opinion, point to the idea of a miasmal origin.

In Delhi, Lahore, Rajpootana, Gwalior, and Scinde, where boils of the worst character prevail, the districts are very sandy; and I would refer my readers to an article in THE LANCET of Sept. 3rd, on the "Evolution of Malaria by Sandy Soils," which is very suggestive, and coincides very much with what I have noticed in India.

That the drinking of well-water is the sole cause of the Delhi boil is an opinion I cannot incline to. There are numberless instances of both Europeans and natives who have freely drunk the well-water, and yet have never been attacked by boils, and *vice versâ*; still I think that, where there is a tendency for boils to break out, the well-water may, from its general impurities, assist in their development—is an exciting cause, in fact.

The third view which has lately been advanced—viz., that the cause is due to the development of a germ, may be considered *adhuc sub judice*. Still, although these microscopic observations can assist us at present but little in our treatment, they are valuable as opening up a new and important field of inquiry.

The treatment I propose considering under the following heads:—1st. The abortive treatment. 2nd. The local and constitutional treatment of the ulcerative stage. 3rd. The hygienic treatment.

1st. *The abortive treatment.*—This was introduced some years ago, and has been from time to time revived, with a varied measure of success. In my own practice I have found the actual cautery of use when applied to the boil in its "mosquito" stage; but, for it to prove a specific, the patient must apply it at once, otherwise, the tendency of the boil to spread outwards having fairly set in, the cautery becomes useless. The reader will therefore understand the difficulty there is in employing the cautery, particularly in regiments; for, however much you may impress upon the men the importance of reporting themselves on the first appearance of a boil, they are just as unwilling to do so as they are to report themselves when they have gonorrhœa, and have been assured by the "doctor" that by doing so they shall not be put upon the sick-list.

2nd. *The local and constitutional treatment of the ulcerative stage.*—Black wash in many cases I have found to be an excellent dressing, destroying the fungus-like appearance, and setting up a healthy granulating surface. Nitrate of silver, blue-stone, and even dry lint, I have also used with benefit. Latterly, however, I have employed carbolic acid; in the first instance lightly touching the boils with the

crude acid, and subsequently dressing them with a lotion of one part of acid to forty parts of water. The advantages the carbolic acid has over the other applications are its extreme manageableness, its rapidity of action in destroying the fungoid growth and in setting up healthy action. Local treatment I have rarely found sufficient when the ulcerative stage has fairly set in. Patients are generally more or less debilitated, and require quinine or iron. The lactate is the form I usually prescribe, and occasionally I give alterative doses of mercury and ipecacuanha. Where a syphilitic taint is clearly traceable, iodide of potass and sarsaparilla, and calomel fumigation, as recommended by Lee, are indispensable. Skin-grafting would, I should think, very materially assist in the healing of many intractable ulcerated surfaces which have resisted the remedies mentioned above.

3rd. *The hygienic treatment.*—The water should invariably be boiled and filtered, and obtained from the finest source. The patient should be put into the verandah of the hospital, which should be well raised from the ground. The diet should be light and nourishing, with a good allowance of fresh vegetables and limes. Removal to a colder and more bracing climate is in all cases advantageous; while in those cases tainted with syphilis, a voyage to England is absolutely necessary.

London, September, 1870.

PUBLIC VACCINATION.

BY THOMAS NEWHAM, M.D.

FROM the numerous communications received from all parts of England, and from the kind expressions made use of, in regard to my former paper,* I am induced to think that it was not written in vain.

It is an undoubted fact that, much as the successive Vaccination Acts have been improvements on the former ones, there are yet very great difficulties in the carrying out of the various clauses of the Act of 1867. Sections 27 and 28 of this Act empower the guardians in each union not only to take proceedings in every case where obedience has not been paid to the law, but also provide for expenses incurred in prosecutions, and in making known the state of the law with reference to compulsory vaccination.

The greatest difference of opinion exists among public vaccinators as to the way in which boards of guardians should act. Some appear to think that these boards are bound to prosecute immediately on the presentation of the names of recalcitrant persons; others, that the registrar, or other person appointed by the guardians, should do the same; others, again, have an idea that when the lists have been sent in they have washed their hands of the matter, and so make no more exertion in the affair.

Equally with myself, everyone who reads the Act must arrive at the conclusion that to the many boards of guardians throughout the country the public must look for the enforcement of vaccination. While, however, I cannot doubt this fact, I would with all deference point out that public vaccinators have also their duty to perform; and I believe that the two forces united might speedily put an end to the numberless objections now afloat. The public vaccinator, by his contract, is bound to use every means in his power to *induce* parents to have their children vaccinated. He ought to represent to them the importance of the operation, upon hygienic grounds, with regard to the public at large; he should assure them of its safety and general freedom from ill consequences; and, even after the time when the names of objecting persons have been sent to the board, he should not cease in his good endeavours. Let me not be misunderstood upon these points. I do not desire that he should *argue* upon them, but that they should be by him represented as certain facts. I have found, in many instances, that persons who have had what seemed to them well-founded objections to vaccination, have at once consented to its performance when a healthy child of some neighbour, with a good arm, has been put before them; and when, from the use of Weir's vaccinator, the operation has been robbed of its terrors by avoiding bleeding and apparent suffering.

I can condole with my professional brethren when, as is the case in almost every parish, they have some hot-headed opponent to vaccination. Their difficulties are then hard to overcome. Perhaps, also, there may be monetary considerations standing in the way, loss of practice to be thought of, sacrifice of neighbourly feelings, and other matters which may impede their labours. But, while I grant all these opposing elements, I must still be allowed my opinion that they may be gradually, but surely, overcome, in the vast majority of instances, by firm and kindly representation of the requirements of the Act, as well as of its great benefit.

It is also a fact that in many cases the public vaccinator is not seconded in his endeavours by other practitioners in the district; and I learn from my correspondents that this is a great grievance. When requested to have their children vaccinated, the parents frequently prefer to have the operation performed by a private practitioner, and to pay him for it. This is a state of things which frequently assumes large dimensions, hampers the action of medical officers, impedes their exertions in carrying out the Act, and requires altogether exceptional treatment, to be considered hereafter.

Such, then, are some of the difficulties of public vaccinators, and my ideas as to how they are to be met by these officers on their own part. I will now refer to the duties of the boards of guardians, so far as to show that the two forces united would put an end to the many objections afloat.

The board of guardians in each district (as is well known) are, first, to be supplied by the registrars, twice in each year, with lists of unvaccinated children for whom he has received no certificate; they are then to take the cases into their consideration; and, finally, to take steps to compel submission to the Act, either on their own account, or by appointing and paying some person to do so. These proceedings seem simple enough, and by outsiders may be deemed well adapted to relieve the medical officers and render their duties easy. Let us, however, look a little beneath the surface. The guardians are chosen from the district in which they act; they are more or less connected by ties of friendship or relationship; their interests and mutual relations are identical. Sitting at the same table are some persons who agree, and others who disagree, upon many points regarding vaccination. Must we not clearly see that a guardian who favours vaccination would be extremely reluctant to prosecute his intimate friend by his side who does not look upon the matter in the same light as himself? If, again, they appoint a public prosecutor to act for one board only, it is well known that he acts in the name of the guardians, and he incurs precisely the same ill-will. The agent also would, from local associations and influences, be biased in the choice he makes of cases as examples to others. The clerks to boards of guardians are gentlemen of position; but they, even, would not be much inclined to prosecute their clients. Persons of a lower social position may be chosen; but we all know the influences that might be brought to bear in such a case.

I have thus endeavoured to show what are the difficulties in the way of both public vaccinators and guardians. I do not wish to relieve the boards of that responsibility which the Act undoubtedly expects them to undertake; but I would suggest, in reference to the exceptional treatment to which I have before alluded, that the boards of guardians of such a number of unions as may be found practicable should appoint a public prosecutor to act for all. He should be a stranger, and therefore above local considerations. He should be remunerated by all the unions equally—a proceeding strictly in accordance with the Act. His duties would be to obtain the names of all unvaccinated persons from the registrars every six months, so as to allow certificates of unfitness &c. to run out; he should receive the authority of the various boards in a general manner, and set the machinery of the law in motion without distinction of persons. By this appointment I humbly submit that both public vaccinators and boards of guardians would be much relieved, and the public much benefited.

If this suggestion be not acted upon, but things remain as before, then (looking at the matter as one between public vaccinators and boards of guardians) I would decidedly advise medical officers to assert their authority by personal

* THE LANCET, Sept. 3rd, 1870.

prosecutions in the case of ignorant persons who were very obstinate. In cases, however, where the tendency might be to inflict an injury upon the medical officer, the boards of guardians must take the onus of prosecutions upon themselves, or carry out my suggestion of appointing public prosecutors.

Winslow, Bucks, Oct. 1870.

ON THE

VALUE OF TINCTURE OF ARNICA IN THE TREATMENT OF ACUTE PULMONARY AFFECTIONS.

BY C. C. BALDING, M.R.C.S., L.S.A.

I AM desirous of calling the attention of the profession to the value of tincture of arnica in the treatment of pneumonia and other acute pulmonary affections. Some years ago Mr. Mitchell Henry, then assistant-surgeon at the Middlesex Hospital, wrote an article in THE LANCET advocating its use in allaying irritative traumatic fever. A few weeks after the appearance of that article I was summoned to a man, a railway porter at this station, who had been squeezed between the buffers of two trucks. I found the sternum depressed, and, consequently, dislocation of sternal ends of both clavicles; he was suffering acute pain in the chest, and was almost in a state of collapse, and, from his condition, I feared injury to the lungs. With difficulty I got the sternum in position, and when he rallied, which he soon did, I gave him five minims of tincture of arnica every four hours. To my surprise, the pulse kept down; he had no febrile disturbance whatever, and in a few weeks resumed his usual occupation.

It then struck me that a drug exercising such a powerful effect upon the heart's action must be of benefit in acute pneumonia, and I determined to give it a trial, and it was not long before I had an opportunity of doing so. Its good effects exceeded my hopes, and since then I have treated all my cases of acute pneumonia in adults with the remedy, for such I must call it, as I have never known it to fail. I employ it also in acute hæmoptysis; but when there is extensive tubercular disease of the lungs I have not found it lower the circulation. A case of hæmoptysis and one of pneumonia have just come under my care, and these being similar to many others, I will simply give them, thinking the result of the treatment so striking that the profession will be induced to give it a fair trial.

Bernard T——, aged twenty years, a strong, muscular young man, a brickmaker, attended at my surgery, four miles from his own home, on Sept. 1st. He was seen by my assistant, Mr. P. P. Langford, who reported him suffering from acute febrile disturbance. He advised the patient to get home as quickly as he could and go to bed.

On the 3rd Mr. Langford visited him, and found that he was suffering from acute pleuro-pneumonia of the right side. Posteriorly there was dulness over nearly the whole of the lung, with friction sound and some small crepitation in the upper part. At the base of the left lung, for about two fingers' breadth posteriorly, the mischief had commenced. Pulse 100, full and incompressible; respiration not taken. Mr. Langford told me of the case before prescribing, when I advised him to give ten-minim doses of tincture of arnica, with solution of acetate of ammonia, every three hours.

Sept. 4th.—I visited him. His countenance was then dusky and anxious; pulse 100; respiration 60. The physical signs of the inflammation showed that it had not extended since the previous day. To continue the medicine.

5th.—Seen by Mr. Langford. Pulse 85; respiration not taken. Medicine to be taken every four hours.

6th.—Pulse 80; respiration 40; countenance improved. Continue medicine.

7th.—Pulse 72; respiration 32; small crepitation audible in upper part of the lung posteriorly. To take the medicine every six hours.

8th.—Pulse 60; respiration 24; lung improving. Continue medicine every six hours.

10th.—Pulse 50, irregular; respiration 30. He was sitting up in bed, taking a milk mess, when I visited him, and expressed himself as quite comfortable. To take five minims of the arnica three times a day.

12th.—Pulse 60, irregular; respiration 24; right lung normal, except for about two fingers' breadth at base, where there is small crepitation; left lung well. To discontinue medicine.

The rapid absorption of the effused products of inflammation in this case is remarkable, but it is only what I have seen in several others. The persistent effects of the drug also are very noticeable, as I have known the pulse remain at 40 for several days after the medicine has been discontinued, and even after the patient has got about. The case of hæmoptysis is briefly as follows:—

Mr. W. B——, small farmer, aged sixty, came to me on the 18th of August last, and said he had coughed up, he thought, three pints of blood on the previous day. I examined his lung, and did not find any signs of extensive tubercular disease. He had been subject to winter bronchitis, and there were symptoms of an atheromatous state of vessels. Pulse 90, full and incompressible. Ordered ten minims of tincture of arnica, with fifteen of dilute sulphuric acid and syrup, every four hours. His pulse was very soon reduced, and in four or five days was down to 40, and remained so for three or four days; he got about his employment in ten days, and has had no return of the hæmoptysis.

I read a paper on the subject, three years since, before the South Midland Branch of the British Medical Association at Luton. Dr. Prior, of Bedford, then president, entered into the subject, and has since given the remedy a trial. At the last meeting of the Branch Association at Aylesbury, a paper of his, illustrated by cases, was read, which spoke very approvingly of the remedy.

I may state that I used to give but five-minim doses of the drug, but since the Pharmacopœia of 1867 has contained a formula for the tincture, which is evidently weaker than that previously in use, I give ten minims. I must ask those who may be induced to give arnica a trial, not to be dismayed should no benefit be apparent in twenty-four hours, but to continue the medicine, and I feel sure the effects will be unmistakable in forty-eight hours; but I have seldom seen a case really get worse from the time the arnica was commenced.

"I have much pleasure in endorsing the above account of Mr. Balding on the use of tincture of arnica in the case of the man B. T——. When I visited him on Sept. 3rd he was suffering from extreme dyspnœa, almost to exhaustion, with severe general pyrexia, so much so that he could hardly sit up to allow me to examine his lungs posteriorly; and this, coupled with the physical signs of extensive mischief in both lungs, led me to form a very unfavourable prognosis of the case. I am truly surprised at the rapid improvement following the administration of the arnica. "PHIN. P. LANGFORD, M.R.C.S., L.S.A."

Shefford, Beds, September, 1870.

ACUTE HEPATIC ABSCESS; EARLY PUNCTURE; RECOVERY.*

BY F. W. KNAPP, M.D. EDIN.

ON the 7th July last I was requested to see a young farmer, who had, for some time previous, been engaged in felling trees while the thermometer ranged from 80° F. to 90° F. in the shade. His illness commenced five days previous with pain in the belly, which continued unrelieved by purgation. He now complained of severe colicky pains, inability to lie on the left side, great tenderness over the hepatic region, which was very tumid, the indurated edge of the liver extending two inches below the false ribs, and the right rectus muscle being very tense. There was general fever, with a soft quick pulse of 120, high-coloured urine, and a coated tongue. He was treated with calomel and opium, followed by purgatives, and blisters to the side. A certain amount of relief followed, but the swelling increased, and irritative fever kept up.

On the 23rd he had rigors and bilious vomiting. On the

* Dr. Cameron, Deputy Inspector-General of Army Hospitals, has been kind enough to condense and forward this communication.

29th the swelling occupied a space extending from a point in the centre of the epigastrium, about two inches from the ensiform cartilage, to the umbilicus, from which it could be traced to the crest of the ilium, and upwards again to the angles of the right false ribs. There was neither discoloration of the skin nor any feeling of fluctuation; but the occasional chills, the sense of throbbing under the ribs, and the persistence of irritative fever, left no doubt on my mind that the patient had a deep-seated abscess in his liver, which, judging by the great enlargement of the organ, threatened to become far too large for recovery if I waited for it to point or burst spontaneously.

An exploring needle was, therefore, pushed deep into the most prominent and painful part of the swelling. No matter followed its withdrawal, but on blowing through the tube over paper a speck was deposited. A straight bistoury was now used, and gave exit to about an ounce and a half of characteristic creamy pus. The patient expressed great relief from the operation, and immediate amendment took place in every respect. Poultices were the only local application; plenty of nourishment was allowed, and iodide of potassium given in sarsaparilla.

By the 30th September (two months only after the operation) his health was perfectly restored; no trace remained of the great hepatic enlargement, and the patient's weight was within a few pounds of its former maximum.

I am desirous of having this case recorded in THE LANCET as it is to papers on hepatic abscess published in that journal a few years ago that I am indebted for its fortunate termination; and I doubt not it will interest many brethren whose lot is cast in lands where the formidable disease in question claims many victims.

Sackville, New Brunswick, Oct. 14th, 1870.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum alioram, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A NEW METHOD OF UNITING FLAPS BY DEEP SUTURES.

MR. COUPER, who has for some time past practised Professor Lister's system of antiseptic treatment of wounds with very good results, has, quite recently, combined with it the following means of securing apposition of the deep portions of flaps. A curved needle, into which is threaded a large carbolised gut ligature, is introduced into the flap, close to its edge, and a short distance from its base; the needle is passed in a semicircular course, transversely to the axis of the limb, immediately beneath the skin, until it emerges at a corresponding point on the opposite side of the flap; the thread is then drawn through to within two or three inches of its end. The needle is next introduced into the other flap, at a point opposite to where it emerged from the first—the point which, as far as can be judged, will correspond to it when the two surfaces are brought into contact,—and is made to travel in a similar transverse semicircular direction, so that in the end it emerges in the one flap at a point opposite and corresponding to the one where it was first introduced into the other, having completed a circular course beneath the skin of the two flaps. The ends of the suture are drawn until the flaps are brought into accurate contact (much as the mouth of a bag is closed by drawing the ends of a circular string), and knotted and cut off short. If the flaps are long, another suture is passed parallel to the first, a little further from their bases; and when the skin edges have been secured with another suture, the one or more circular ones, knot and all, are completely included and shut out of sight. Before the external suture is quite secured, a syringe is insinuated between the flaps at the spot which remains open, and a jet of carbolised fluid is injected to ascertain whether there remains sufficient egress for any fluid that may be poured out from the wounded surfaces. In the first cases Mr. Couper employed for the external suture a fine gut thread, which he tied interruptedly, so as to have an abundant opening for discharges; but, as he found it to give way before sufficient union had taken place, he has resorted to the use of metal sutures; and, as the precaution he employed for the free discharge of matter proved to be unnecessary, he has used iron wire in his later cases, and applied it in a very close uninterrupted stitch, which is made to include the skin only.

A few days since we saw a case in which Mr. Hutchinson had amputated the forearm at about the middle, and in which Mr. Couper had, at the operator's request, undertaken to bring the flaps together in the manner above described, with all the precautions of Lister's system of dressing. It was the ninth day since the operation; the situation of the union of the flaps was indicated by a thin line of dried sanguineous matter, altered in colour by the carbolic dressing, beneath which lay the finely stitched continuous suture, which, as nothing but the extreme edge of the skin had been included, would, in the course of two or three days more, cut its own way through, and separate itself without external aid. We ascertained that, with the exception of a very slight serous oozing during the first twenty-four hours, no discharge whatever had been thrown out; nor has there been in any of Mr. Couper's later cases which have been similarly treated. In some cases he finds it useful to employ in addition one or two gut sutures, inserted by transfixion of the flaps, and tied externally. These wither in the course of two or three days, at the point where they enter the skin; and when brushed away leave a small red cicatrix of about the same diameter as the suture employed.

CASES UNDER THE CARE OF MR. JAMES ADAMS.

On the occasion above referred to we also saw a man who had undergone amputation of the thigh for disease of two years' standing. Mr. James Adams, who at the time had charge of Mr. Maunder's wards, had employed, in uniting the flaps, two parallel circular sutures, according to Mr. Couper's plan, without, however, adhering to the carbolic-acid treatment. It was considered that union had taken place with unusual rapidity, and with less suppuration than generally occurs.

Mr. Adams also pointed out instances of the following unusual injuries:—

Dislocation of the Right Os Innominatum.—This injury had befallen a Greek sailor ten weeks previous to admission, in consequence of a violent blow which fell upon the bone a little above the acetabulum. On admission the entire bone was found to move freely at the symphysis pubis anteriorly, and at the sacro-iliac synchondrosis posteriorly. A double spica bandage had been applied, and the patient kept at rest. At the time of our visit, a month later, the bone had become much less movable. There had been no symptoms of injury either to the pelvic viscera or to the hip-joint.

Fracture of the Epiphysis of the Crest of the Ilium.—A young man, twenty years of age, had been thrown down and kicked on the left hip. On admission a small wound was found below the anterior superior spine of the ilium, and a long, slender solid body was found to glide freely on the crest of the ilium, both when forcibly moved and during a deep inspiration. The sensation conveyed to the finger suggested that the contiguous surfaces of the loose body and the iliac crest were smooth and cartilaginous. There was no bony crepitus. A spica bandage had been applied, and the mobility of the severed epiphysis was becoming less.

In the early part of the afternoon Mr. Adams had removed, by Teale's operation, the leg of a man who had a large malignant ulcer of the heel.

DEATH AFTER INHALATION OF CHLOROFORM.

A robust man, twenty-eight years of age, died recently at this hospital about three minutes after the completion of an operation for fistula in ano, which had occupied not more than two or three minutes. He had taken chloroform without any unusual difficulty, and had lain during the operation on his left side; his pulse had been good through-

out. The operation being completed, he was replaced on his back, and immediately ceased to breathe, and became livid in the face. Meanwhile the heart continued to beat regularly, though feebly. After artificial respiration had been employed for a few minutes, he breathed normally for a few seconds, and then both breathing and pulse ceased altogether. Artificial respiration was carried on for forty minutes without avail.

The heart was found to weigh fourteen ounces; the left ventricle, the walls of which were pale and flaccid, and covered externally with only a thin layer of fat, was full of dark fluid blood; the mitral orifice freely admitted the tips of four fingers. The muscular fibres of the heart were found under the microscope to contain an abundance of fat-globules. The lungs were congested and œdematous; the pulmonary artery was full of blood. The stomach was empty and healthy; the spleen large and soft. The brain and kidneys were normal. The blood was everywhere fluid.

UNIVERSITY COLLEGE HOSPITAL.

SEVERE INJURIES SUSTAINED BY A FALL OF SIXTY FEET; DEATH NINE DAYS AFTER.

(Under the care of Mr. ERICHSEN.)

THE following case, which is gathered from the notes of Mr. Beck, registrar to the hospital, is interesting on account of the transient nature of the spinal symptoms, the peculiar injury to the pericardium, and the length of time the patient survived very extensive and severe injuries.

Louis B——, one of the servants at the Langham Hotel, had been waiting for the descent of the luggage lift, and imagining that it was in the act of passing the story on which he was waiting, made a leap into the shaft. He fell about sixty feet, and alighted chiefly on the right foot, but at the same time his back struck violently against something behind him.

On admission he was quite conscious, but suffering severely from shock. There was great swelling of the tissues below the malleoli of the right foot, especially on the inner side; the swelling extended a short distance up the leg, and on the inner side it fluctuated freely, and was obviously due to effusion of blood. The malleoli themselves were immovable, and afforded no crepitus; but indistinct crepitus, apparently in the region of the astragalus, could be felt when the entire foot was moved; there was no lateral displacement, and the malleoli held the ordinary relation to the heel. A large tumour, nine inches in diameter, and obviously due to extravasation of blood immediately below the skin, was found in the upper lumbar region. The second and third lumbar vertebræ appeared to be slightly depressed, and laterally displaced; but their position could not be ascertained with certainty on account of the swelling. The legs could be freely moved. Crepitus was detected about the seventh rib on the left side, four inches from the sternum. The patient suffered great pain, especially in the back. On the second day he felt better, but suffered a great deal of pain. He passed water freely until the afternoon; in the evening the use of a catheter was required. The pulse was natural.—Fourth day: He continued to be unable to pass his water, but felt better. The pulse was 96, full and regular. Sensation and power were unimpaired in the lower limbs.—Fifth day: The pulse was 100 and regular; rather severe hiccough came on in the afternoon.—Sixth day: He had in the morning a well-marked rigor, which was followed by sweating; the pulse was 164, small and weak; the temperature 103·4° F. The pain in the back continued severe, and a burning pain was felt in the back of the thighs and calves of the legs. Motion and sensation were unimpaired; but in the afternoon he complained of crampy pains in the legs. The tongue was covered with a creamy fur, and, in spite of frequent doses of medicine and purgative enemata, his bowels had not been open since admission. There remained some hiccough.—Seventh day: Pulse 124, weak; urine had to be drawn off; no sleep last night; no rigors or cramps; no pain in back or limbs; bowels not open.—Eighth day: Pulse 104, fuller and stronger; hiccough troublesome; bowels slightly open; no spinal symptoms.—Ninth day: A red and œdematous swelling appeared on the root of the neck at the right side; it was tender on pressure, filled up the supra-clavicular depression, and overlapped the prominence of the bone. There was no appearance of effusion of blood; no crepitation.—Tenth day: Died at midday, having for some hours had difficulty in breathing, apparently on account of obstruction caused by the tumour at the root of the neck.

The post-mortem examination was made twenty-five hours after death (Nov. 1st). The body was in an advanced state of decomposition. All the deeper intermuscular planes at the right side of the root of the neck were filled with pus. On opening the abdomen, a little lymph was found in some places between the coils of intestine; the evidences of peritonitis became more marked towards the pelvis, and the recto-vesical pouch was found to contain a mass of lymph about half the size of an egg, of yellow colour and firm consistence. The mucous membrane of the bladder was soft, thick, and congested. The other abdominal viscera were healthy.—Thorax: The seventh and eighth ribs were fractured on the left side; and on the right side, the first, second, seventh, eighth, and ninth. The first and second ribs were fractured about three-quarters of an inch and one inch respectively from their angles; all the others were broken about the middle. The fractured ends of the broken first and second ribs were found bathed in pus exuding from a wound in the apex of the right lung, which was in a state of old phthisical consolidation, and adherent to the pleura; this appeared to be also the source of the pus which had been discovered at the root of the neck. On the anterior surface of the pericardium was a rent two or three inches long, through the upper part of which passed the phrenic nerve. On one side of the rent there was a small extravasation of blood into the tissue of the pericardium; its edges were slightly ragged and thickened. There were traces of both old and recent pericarditis at the base of the heart. The right pleura was inflamed, and contained a small quantity of grumous bloody matter. Both lung apices presented about two inches of old consolidation.—Spine: The spinal cord, membranes, and the roots of the nerves were all found quite healthy. The spines of the three last dorsal and two upper lumbar vertebræ were found to have been chipped off. The body of the second lumbar vetebra was fractured completely through, and the right transverse process broken off. There was great extravasation of blood round the spinal column, but none within the canal. There was no displacement of any portion of the column sufficient to produce pressure on the cord.—Foot: The os calcis was completely smashed, being reduced to powder at the anterior part. The astragalus was uninjured; but the scaphoid was fractured vertically through the middle of the surface articulating with the former bone. The other bones of the foot were uninjured.

HOSPITAL FOR CONSUMPTION, BROMPTON.

PNEUMOTHORAX; PARACENTESIS; ACUTE TUBERCULOSIS.

(Under the care of Dr. REGINALD THOMPSON.)

THE following case has some points of interest, not only on account of the relief afforded by a simple operation, but also as an instance of very rapid invasion of tubercle, which in all probability began and ended in the space of four weeks. For the notes and careful observations of this case acknowledgments are due to Mr. Bartlett, the senior clinical assistant to the hospital.

Dr. Thompson observes that paracentesis was resorted to on account of the evident symptoms of severe pressure within the chest, doubtless aggravated by the absence of any communication through the lung with the outer air. Relief was undoubtedly afforded, and he would certainly resort to the same operation if a similar case presented itself.

George B——, aged twenty, had been strong and healthy until eighteen months before admission. He had at that date caught a cold, which was followed by a cough, and in six weeks by a severe attack of hæmoptysis. Some time afterwards he applied as an out-patient, and Dr. Powell, who examined him, found signs of a vomica at the apex of the left lung. On questioning the patient closely, it was ascertained that he had been much worse, and had suffered from dyspnœa for two weeks before admission. When admitted he was in a state

of extreme collapse; his face was pinched and blue, the extremities very cold, the pulse 140, and the respiration hurried, 40.

He was examined the following day, when the condition of pneumothorax was ascertained. The heart was pushed far over to the right side, and was beating above the right nipple, the apex being situated close under the right edge of the sternum between the fifth and sixth ribs. The right lung was little, if at all, affected; the breathing was harsh, but there was no reason to believe that tubercle was present in it at the time. The left side of the chest was much bulged, and there was no depression of the intercostal space on inspiration. No air was heard to pass into or out of this side, and it was evident that the opening which had existed was now closed. There was also very little fluid in the chest. From the condition of the heart, and the bulging of the chest, it was obvious that considerable pressure was exerted by the air in the chest, and it was therefore determined, after a consultation, to puncture the chest. This was done by Mr. Bartlett in the usual place, and the air passed out with a rush. The patient expressed himself as much relieved by the operation; the respiration became fuller and less hurried, and the pain of tension, which had been caused by the presence of air, was mitigated. In the evening, the patient could turn on his left side, and his breathing and cough were much relieved. His temperature was 101·4° F.; his pulse 120; his respiration 30. He was ordered half a grain of opium every three hours.

The next day he had slept well, and was free from pain; his breathing was no longer hurried, and his face was not blue; his morning temperature was 100·6°, his pulse 120, and the respiration 30; in the evening his temperature was 100°. Two days after paracentesis had been performed the following observations were made:—Morning temperature 99°, pulse 100, respiration 24; evening temperature 99·8°. On the third day he suffered a little from flatulent dyspepsia, but he had passed a good night. He was ordered one grain of opium at bedtime. The morning temperature was 98°, pulse 100, respiration 24; evening temperature 100°. On the fourth day the morning temperature was 98°, the pulse 100, and the respiration 24; evening temperature 99°.

The patient remained much in the same condition until the beginning of November, when, thirteen days after the operation, it was found that the right lung was becoming involved, and crepitations were heard over the lower part of the lung posteriorly. His temperature was 99°; the pulse 108; the respiration 32.

The symptoms led to the conclusion that acute tuberculosis was setting in, and this opinion was ultimately confirmed. The temperature varied between 99° and 101°; the pulse beating 110 per minute; the respiration became much more rapid; and, in spite of all that could be done, the patient wasted rapidly, and gradually sank, dying thirty-five days after admission.

The necropsy was made by Mr. Bartlett. The body was extremely emaciated. The left side of the thorax contained about a pint of fluid. The left lung was collapsed, and adherent to the back and upper part of the chest. The pleura was much thickened. At the apex of this lung were found two small vomicæ, and yellow cheesy patches of tubercle, varying in size from a pin's head to a small pea. No communication with the pleural cavity could be discovered, although careful search was made. Throughout the right lung grey miliary tubercles were found scattered. The peritoneum was thin and transparent, but the vessels were much injected, and the membrane was studded throughout with specks of miliary tubercle, which were distributed quite irrespectively of the vessels. The other organs were healthy. The pressure from within, previous to opening the chest, had been ascertained, by means of the apparatus suggested by Dr. Powell, to be equivalent to 1¼ in. of water.

ANDERSONIAN UNIVERSITY MEDICAL SOCIETY.—Mr. J. Cannell lately read an able paper in favour of the admission of ladies into the profession, on which a spirited discussion took place, the meeting being decidedly against the entrance of ladies. At the same time it was considered it was not right to debar their admission provided they could obtain the necessary amount of information without mixed classes.

Provincial Hospital Reports.

BRISTOL GENERAL HOSPITAL.

TWO CASES OF VIOLENT DELIRIUM TREMENS TREATED BY LARGE DOSES OF HYDRATE OF CHLORAL; RECOVERY.

(Under the care of Mr. LANSDOWN.)

THE following two cases, forwarded to us by Mr. Nelson A. Dobson, the house-surgeon, are instances of very decided beneficial effects following the bold administration of chloral hydrate, in patients in whom the dangers of violent delirium tremens were increased by the presence of serious local injury.

J. P——, aged forty-one, a publican, was admitted with a compound fracture of the tibia and fibula, at the middle third, with considerable displacement of bone. The leg was placed on a Cline's splint, and dressed with carbolic plaster. The patient habitually took a large quantity of beer, and confessed also to a weakness for spirits. He was put on milk diet, with two ounces of whisky daily. During the third day after admission it was observed that his manner was strange, and about midnight the house-surgeon found him swinging his leg about as if nothing were amiss with it, furiously delirious, and behaving with violence to everyone who approached him. To keep him in bed it was found necessary to secure him in a strait-jacket. Thirty drops of the liquor morphiæ were administered hypodermically, but produced no effect. He continued to rave all night. The following day he was somewhat quieter in the morning, but still very noisy. Towards midday he became much worse, and at 3 P.M. a drachm of hydrate of chloral was administered in half a glass of porter; this made him drowsy for a minute, but nothing more. At 3.30 another drachm of chloral was given with more success, for in a short time he fell into a sound sleep, which lasted two hours; when he awoke he was somewhat less furious. Towards evening the delirium again increased, and the dose of chloral was repeated. He passed a good night, sleeping for several hours. On the fifth day he was much better; he had slight confusion of ideas, but no delirium; in the evening he was rational. The drachm of chloral repeated. From that date he progressed uninterruptedly well, both as regards his mental condition and the fracture.

The second case was that of S. A——, a female, aged fifty-seven. She was admitted with simple fracture of tibia and fibula. This patient had been in the habit of taking large quantities of beer. She was ordered milk diet, and the leg was put up on a short outside splint. She appeared quite comfortable up to the third day; then, in the morning, she became restless and excited, and answered questions irrelevantly. Mr. Lansdown ordered thirty grains of hydrate of chloral immediately. After this her excitement increased, and at 8 P.M. she was furious—if possible, more violent in her language and actions than was the above-mentioned patient. She then took a drachm of the hydrate of chloral without effect; at 8.30 P.M. the dose was repeated in porter, the patient having a partiality for that beverage. This second dose did not absolutely quiet her, and at 9 P.M. the house-surgeon, wishing to repeat it, was obliged to mix it with an enema of four ounces of beef-tea, as she had become suspicious of drinks. This finally quieted her, and when she was seen later in the evening she was in a deep sleep, breathing heavily, but presenting no cause for alarm. On the fourth day she was found free from delirium, but facetious and jocular, and to prevent a fresh accession of the violent symptoms, another drachm of chloral was given at 11 A.M. In the evening she was perfectly rational, but restless, and begged for a "sleeping-draught," which was given in the shape of another drachm of the chloral hydrate. There was no further trouble with this patient.

With reference to these cases Mr. Dobson points out that the man took on the first day three drachms of chloral between 3 P.M. and 9 P.M., and that the woman took the same quantity in one hour, in addition to the half-drachm which she had previously taken in the same day. He believes, with Sir Thomas Watson, that "sleep is the great remedy," and adds, "that as soon as it was induced, a cure

followed with more safety and celerity than he has ever seen to result from the exhibition of morphia, opium, digitalis, or bromide of potassium."

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 13TH, 1870.

DR. BURROWS, F.R.S., PRESIDENT, IN THE CHAIR.

TEMPORARY GLYCOSURIA AS A SEQUEL OF CHOLERA.

BY WILLIAM SEDGWICK, M.R.C.S., L.S.A.

AFTER a brief historical retrospect of the subject, the author remarked that, in studying the character of the urine in cases of cholera, attention should in the first instance be directed to the fact that the first and albuminous urine passed or withdrawn after the usually prolonged suppression of the secretion was usually deficient in urea, and free from sugar; and that the subsequent condition of temporary glycosuria was preceded by the occurrence of a blue colouring matter, which appeared to be intimately associated with saccharine transformation. It was a significant fact that sugar in the urine occurred not, as a rule, in the first urine secreted after a more or less prolonged suppression, but subsequent to the occurrence of albumen; and that whilst there was during the early stage of cholera convalescence a relative deficiency of urea when albumen was present, sugar, on the contrary, was associated with urea in excess. The deficiency of urea which occurred in connexion with the albuminous urine of cholera was the more noticeable from the fact that, as the amount of urine secreted within a given time, after the previously complete suppression of it, was small, the proportion of urea should have been relatively increased, if the development of that organic principle in the system had been uninterrupted; and consequently it might be suggested that, as urea had been found to be one of the best diuretics, the suppression of urine which occurred in cholera and in allied conditions of the system resulting from poison or from disease, admitted of being directly referred to temporary arrest in the formation of that excrementitial product. The production of the blue colouring matter in the urine of patients suffering from cholera was chiefly important from the fact that it was very closely associated with the development of glycosuria; the occurrence of sugar in the urine in such cases appearing to be simply a somewhat later stage in the series of pathological changes which, so far as they affected the urinary secretion, could be traced to one common origin. Attention was directed to the frequency of the occurrence of a blue colouring matter in the urine in a great many other diseases which, like cholera, admitted of being more or less directly referred to the alimentary canal; and it might be suggested as probable that, as sugar had also been found in the same class of cases, those two abnormally increased, if not altogether abnormal, constituents of the urine were due to the same cause, and derived from the same source. In reviewing the pathology of the urine in cholera, the chief facts to which attention should be directed, with reference to the occurrence of glycosuria, were—the suppression of the urinary secretion as a primary result of the disease, with arrested formation of urea; albuminuria, with deficiency of urea; the presence of a blue colouring principle; and, finally, diuresis, with excess of urea and sugar in place of albumen. In the sequence of phenomena there indicated, urea as the essential principle of the urine necessarily occupied the chief position; and the subsequent presence of sugar during the stage of convalescence, when albumen was no longer present in the urine, suggested that the temporary glycosuria of cholera might be due rather to the progress of reparation than of destruction, and that it was, as it were, the result of an excess of restorative effort on the part of the system to repair loss from previous disease. This suggestion derived support from what occurred in diabetic patients during an attack of fever, when sugar in their urine was apt to be replaced by albumen; and by what occurred in the same class of patients during the last agony, when a similarly retrograde course with respect to the pathology of the urine was pursued; for in them also the urine became albuminous, and the sugar disappeared; and it was moreover supported by a large amount of collateral evidence which was almost conclusive in its favour. It would be found useful, in studying the character of the glycosuria which had been observed during convalescence from cholera, to take into consideration the various physiological, pathological, and artificially produced states of the system in which, as in cholera, sugar was commonly present in the urine without giving rise to confirmed diabetes. For temporary glycosuria, like the previous suppression of urine, had no claim to be regarded as an exceptional phenomenon, which was in any way characteristic of cholera; but, on the contrary, it would be found to occur during convalescence from other forms of acute disease, in which it was often associated with the previous development of a blue colouring principle in the urine. It would be found also to occur, apart from disease, as a physiological condition during certain stages of development, and at certain epochs of life. And, finally, that it admitted of being experimentally produced. With reference more especially to the occurrence of temporary glycosuria in the latter class of cases, as a result of sympathetic nerve section, the author remarked that in all experiments of that kind the primary effect produced must be on the vascular system to which the branches of the sympathetic nerve were distributed, and that any effect produced on other parts of the organism must be secondary to that. Consequently, whilst recognising vascular paralysis as the primary result of section of the sympathetic nerve in all parts of the system, it was important to notice that in the secondary results produced no such constant uniformity had been observed, since these were liable to vary according to the locality in which the experiment had been performed. He was of opinion that, with regard to the occurrence of temporary glycosuria as a sequel of cholera, there was no fact in experimental physiology more significant than that observed by Eckhardt in 1867, of the absence of sugar from the urine after section of the splanchnic nerves, which, taken in conjunction with the fact observed by Moreau in 1868, that section of those nerves was followed by an intestinal flux, possessing the same characters as the flux of cholera, indicated very clearly the direction in which the inquiry should be pursued. For when the neuro-paralytic condition of the digestive canal so produced was compared with what occurred after the influence of the central portion of the sympathetic nervous system had been artificially increased by the application of galvanism or electricity to the part during life, as shown in MM. Linati and Caggiati's experiments, it would be found that the results then obtained were essentially opposed to those which followed arrest or diminution of that influence, either from section of the nerves or from cholera.

In conclusion, the author remarked that the temporary glycosuria which had been observed in all the various cases which he had cited might be regarded as a consequence of long-continued and immoderate secretion, consequent on a previous diminution or arrest of the influence of the sympathetic or vaso-motory nervous system, which apparently occupied a position functionally midway between the secretory surface on the one side, and the supply of blood on the other, and thus became the moderator of secretion in virtue of its action as controller of the circulation. From his observations on the subject, he had been led to infer that all secretion was associated with saccharine transformation; and that whilst, on the one hand, an excess of secretion was accompanied by a corresponding excess in the formation of sugar and consequent glycosuria, a moderate exercise of secretory function was, on the other hand, accompanied by a correspondingly moderate formation of sugar, which was not more in amount than could be disposed of in the system; and that it was only when the blood contained sugar in excess from such causes as those which had been already referred to that some of it was, in consequence, eliminated by the kidneys. Consequently, it might be urged that the temporary glycosuria, which occurred as a sequel of cholera, served to show that during reaction from previous collapse there was a temporary excess of restorative effort, and that although, as was well known, an abortive attempt at reaction was in that disease a very common cause of death, yet in those cases of cholera which terminated favourably, and in which glycosuria had been observed to occur during convalescence, the subsequent dis-

appearance of sugar from the urine might be accepted as evidence in favour of the normal balance of organic function having been satisfactorily restored, and that the tendency to excess during recovery from a central arrest of nutrition had ceased.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOV. 28TH, 1870.

MR. GAY, PRESIDENT, IN THE CHAIR.

MR. WEEDEN COOKE detailed a case of a child from whose lip a large Nævus had been removed by the aid of two écraseurs working at either side of the mass. Caustics had altogether failed to diminish or retard its growth.

A discussion followed in reference to the danger of injecting perchloride of iron into nævoid growths, and incidentally tumours and aneurisms. Mr. B. Carter, Dr. Crisp, and Dr. Brunton mentioned instances in which the procedure had been followed by instant death. Mr. Adams mentioned that he had been successful in curing small aneurisms by injecting the iron solution, without an accompanying bad result.

THE PRESIDENT closed the discussion by bringing to the recollection of the Fellows the fact that he had, at the instance of Baron Larrey, advocated several years before the practice of curing aneurisms by injection of the perchloride, and he added that he was in the habit of cutting out nævi just as he would any other tumour, and he was pleased with the results.

The paper of the evening was by MR. SPENCER WATSON "On the Causes of Failure in the Operation for Squint," based upon an analysis of 103 cases of convergent, and 25 cases of divergent, squint. The causes of failure Mr. Watson classified under the following heads: — 1. The pathological conditions were misapprehended. It had been thought to be due to mechanical obstruction to the movement of the muscles, or to bands of fascia; but this was an error. In two-thirds of his cases hypermetropia was one of the conditions present; at the same time retinal changes had some influence in determining the permanent character of the squint. 2. The operation failed when improperly used. When there is eccentric fixation from any cause, an apparent squint is seen, and in such cases an operation gives rise to diplopia, and would not benefit, unless the other eye was much impaired in its visual power; or, again, squint may be apparent in cases in which one eye is very much larger than the other, from the presence of progressive myopia in one, and a normal state of the other. The cornea of the smaller eye appears nearer the inner canthus than that of the larger eye—an appearance that may mislead. 3. The tendon may be missed or divided too far from its sclerotic insertion. 4. The after-treatment may be improper, or the patient may object to a second operation, or to necessary glasses, &c. Mr. Watson held that the operation should be avoided or deferred in periodic squint, apparent squint, and squint in very young children who cannot wear glasses, and in brain cases. He further urged the use of the strabismometer, invented by the late Mr. Zachariah Laurence.

MR. CARTER said it was always right to lead the patient to expect two or three operations. In squint from paralysis of the external rectus, division of the internal rectus and faradisation was a good mode of treatment. Squint sometimes arose from a faulty direction of the roots and cones of Jacob's membrane.

MR. JABEZ HOGG thought the eye was often anæmic in squint. Sometimes squint and hypermetropia went together. He still used with satisfaction Dieffenbach's mode of operating.

MR. HOLTHOUSE said he had seen a too free division of the conjunctiva followed by retraction of the caruncle and free granulations. When the internal rectus was divided, vision often so rapidly improved that the nutrition of the eye must have been good.

MONDAY, DEC. 5TH.

MR. STREETER opened a discussion on the value of Belladonna in Nocturnal Incontinence of Urine, by narrating the case of a young lady, aged seventeen, in whom this complaint had been effectually remedied by the drug in the form of tincture, and in five-drop doses. Mr. Streeter thought these cases were common in strumous children, and he had found iodine, set free from iodide of potassium by a feeble acid, as in the spirit of nitrous ether, good, and in some cases in connexion with iron.

MR. DE MÉRIC spoke favourably of the belladonna treatment of incontinence.

MR. HENRY SMITH showed a specimen of Lobulated Tumour removed by him from a man, aged forty-five, from whom a similar tumour had been taken, and from the same part, three years before. In eighteen months a fresh tumour had re-appeared in the original cicatrix. The removed mass was fibro-plastic.

MR. PETER MARSHALL asked for information relative to the value of Chloral in the Treatment of After-pains. His own experience was not favourable to its use.

DR. BRUNTON agreed with Mr. Marshall that in after-pains chloral was of no use, but he had found it efficacious against false pains.

DR. BRUNTON then read the paper of the evening on "Prolapse of the Funis, and its Treatment by the Postural Method." The author reviewed the methods of treatment advocated in obstetric works, and showed that all of them were deficient in applicability, and in good results, compared with the postural method, which was always applicable, the hand being the only instrument required, whilst there was no danger in its employment to the mother, as in version. Out of ten cases treated by this method by Dr. Brunton, in eight the children were born alive, and the death of the children in the two remaining instances was accounted for by special causes, one child being dead before the operation was commenced. The procedure consists in altering the direction of the internal axis or plane, which is downward and backward when the mother lies on her back, and nearly level when she is in the usual obstetric position, by placing the patient on her hands and knees in the attitude of an Eastern worshipper, so that the axis is made to pass backwards and upwards, and under these circumstances the cord can be returned by the hand during the intervals of pain, or by its own weight it slips up beyond the head. When the funis is returned, and the pains bring the head down, the usual position may be assumed by the patient. The author had not seen the postural method described in the manuals of obstetrics except cursorily, and he believed that its more frequent use would tend to diminish the infant mortality from funis presentations.

DR. ROUTH said he had heard the late Sir J. Simpson say that the postural method originated with Dr. Hamilton, of Edinburgh, and he (Dr. Routh), was content to use it without assistance from the fingers. In one case convulsions followed the introduction of the hand into the vagina, and here the change of position did all that was needed, and stopped the convulsions.

MR. STREETER was acquainted with the method as far back as 1842.

MONDAY, DEC. 12TH.

An interesting case of Cancer of the Pylorus, with the actual diseased structures, was brought under the notice of the Fellows of the Society by MR. RALF. The man was admitted to Charing-cross Hospital with supposed aneurism. He had an ill-defined globular swelling over the abdominal aorta, with distinct pulsation; there were no stomach symptoms; no vomiting of blood, nor other signs of cancerous disease. A hard grating bruit was heard over the tumour. On careful examination it was found that the tumour varied somewhat in position from time to time with regard to the umbilicus, as in standing or lying, with the ingestion of food, &c.; and at length a diagnosis of pyloric disease was made, and confirmed post mortem.

MR. HENRY SMITH showed a Testicle removed from a man who had suffered from swelling &c. of the testis, which at length protruded through a large circular ulcer of the scrotum. Syme's operation failing, Mr. Smith removed the testis, which, in section, displayed two or three large masses of dense white fibroid tissue, probably syphilitic.

This specimen gave rise to a discussion, the tendency of which was to show that so-called "tubercular" testicles are in reality, in many cases, affected with syphilitic disease.

MR. SPENCER WATSON exhibited a Case of Ectropion which had been successfully operated upon.

The paper of the evening was read by Mr. TEEVAN. Its title was "Practical remarks on Stone, with an analysis of twenty-four cases." Mr. Teevan stated that he had operated on twenty-four patients, twelve boys and twelve men. All the former, and five of the latter were cut, and the remainder lithotritised. All the patients, except two, recovered. One, aged sixty-six, died five weeks after lithotomy, and the other, aged seventy, died suddenly from heart-disease, whilst straining in passing a fragment. Lithotrity ought always to be performed, where possible, in adults in preference to lithotomy. He had been obliged to resort to lithotomy in the cases stated on account of the great size of the calculi. A large phosphatic stone might be crushed with safety, if the patient was strong and not old. Lithotrity in old men ought to be performed in a number of very short sittings, so as to necessitate only a day's confinement to bed in each week. Lithotomy, as at present practised, was founded on erroneous principles, and was fraught with much injury to the patient, as it usually destroyed his virility by occluding the ejaculatory ducts. Median lithotomy was unjustifiable, for it was attended with the largest mortality, and lacerated the floor of the prostatic urethra. The external incision ought to commence low down in lateral lithotomy, as less vascular parts were wounded thereby, and the stone ought to be extracted through a very free internal incision. The so-called process of dilatation was, in reality, complete rupture and laceration, and ought to be abandoned as unsurgical and dangerous. A very short rectangular staff was best, with a groove continued on the vertical part for one inch. The sound ought to have a beak only half an inch long. The left forefinger was the best instrument for extracting stone from boys, and, in adults, a simple polypus forceps ought to be used. A tube after lithotomy was a gratuitous irritant. Mr. Teevan concluded by exhibiting the various calculi he had removed or crushed.

Mr. HENRY SMITH said that the facts brought forward by Mr. Teevan tended to upset the present accepted ideas regarding lithotomy.

Dr. WEBB, U.S.A., stated that the limited incision was preferred in America, but that he himself liked Mr. Teevan's method better.

Dr. WILTSHIRE had seen Mr. Teevan cut for stone, and was surprised at the simplicity and celerity of his method.

Reviews and Notices of Books.

General Report on the Lunatic Asylums, Vaccination, and Dispensaries in the Bengal Presidency, 1868. Compiled by Surgeon-Major J. T. C. Ross, F.R.C.S., Officiating Secretary to Inspector-General of Hospitals, Indian Medical Department.

Medical and Sanitary Report of the Native Army of Bengal for the year 1869. Compiled by Surgeon-Major J. T. C. Ross.

WE believe there has been in some quarters an idea that Indian medical officers, during the progress of recent changes in the organisation of the service, have been somewhat remiss in the performance of work calculated to display their powers, and to show to those in authority that there were in India men equal to any requirements of enactment or public opinion. Such a charge has been hinted chiefly, if not exclusively, against the heads of departments; for, while it is well known that the executive medical officers have been eminently painstaking, there seems to have been no proper utilisation of their labours. Their work has been well done and well recorded; but the records have been suffered to decay on the shelves of a central office, for want of a hand to combine them into one uniform whole, to generalise from the mass of detail, and to present to the Government those great facts about health and disease which, when drawn from years of time and from myriads of instances, form the only safe data upon which measures of State Medicine can be founded.

For this reason we are the more glad to welcome the reports which Surgeon-Major Ross has lately compiled or edited. One of them is a general Report on the Civil Medical Institutions and the Vaccination Service of the entire Bengal Presidency, including the Lower and North-west Provinces, the Punjab, Central Provinces, and Oudh, for 1868. The others are Medical and Sanitary Histories of the entire Native Army of the Presidency, for 1868-69. Of reporting in India there has been, in one sense, enough and to spare; but never until now has any attempt been made to embrace in one comprehensive view the medical history of our civil and military administration among so large a mass of its people; never, that is, among all the records of local work has any attempt been made to bring their contents into compact form, or to make them available and easy of reference to the Government. Such an attempt has now been made, and with a success which has not only called forth the encomiums of the Government of India, the Secretary of State, and of the War Office Sanitary Commission, but has also led to arrangements for the regular publication of similar reports in Bengal, as well as in the other presidencies.

The Military report is an abstract of those furnished by surgeons of regiments, to which are added, in 1869, the local reports of deputy inspectors-general, including particulars of military districts and stations, as well as of the health of troops, and forming a vast collection on matters of interest to sanitarians. The report for 1869 is a great improvement on its predecessor. The editor's account of cholera and fever, and his review of the health of the native army, are very interesting; the medical officers have also risen to the occasion, and have furnished excellent accounts of their work. The Civil volume abstracts all that is of value from the several annual reports of lunatic asylums, and of the large number of civil hospitals and dispensaries, and gives a full account of the operations of the vaccine department from its establishment. Maps and a complete series of tables are appended. Notwithstanding the enormous quantity of material which he has handled, the editor, himself a busy man, has not forgotten that he is the servant of a busy government. Condensation and method are among the leading merits of his work, which is contained in volumes that are invitingly moderate in size.

Our present object is not so much to criticise the contents of these reports as to congratulate the Indian officers upon their appearance. It was full time for such an effort to be made, in order to show that the service will not passively surrender its higher functions, and the consideration which is due to them. The course of events has of late years tended against the interest and position of Indian army surgeons. Junior members of their body have been withdrawn by Government to form a Sanitary Department, which has been encouraged in the idea of holding a higher status than that of the service at large; and the men who have been selected have been those whose powers will bring to the sanitary office credit and repute, which rightly belonged to the mother service in which those powers were first brought to notice. In this manner a feeling has been created among the more active and efficient members of the old Medical Department that they are doomed to obscurity and neglect, in consequence of the belief of the Government that State Medicine, which cares for the health of the million, is something distinct from the science and skill which benefit the individual; and that it will be developed by an opposite course of study—by reasoning downwards from great abstract principles assumed, and often by forcing events into accordance with them, rather than by laboriously collecting the facts of life and health from among the population.

This feeling in the service at large has been increased by

a disposition on the part of the sanitary officers to overstep the legitimate limits of their duties; and it will perhaps be among the useful effects of the reports now published, that they may come to be accepted as a gentle repulse, and may serve to prevent future mistakes of a similar kind, which, in the existing relation of departments, are injudicious and injurious to progress.

We trust that the authorities, in appraising their worth, will bear in mind that they are records of the ordinary work of the old medical service, collected and utilised by one of its members.

The Causes and Treatment of Lateral Curvature of the Spine. Enlarged from Lectures published in THE LANCET. By RICHARD BARWELL, F.R.C.S., Surgeon to and Lecturer on Anatomy at the Charing-cross Hospital. Second Edition. pp. 211. London: Macmillan and Co. 1870.

MR. BARWELL has, in this second edition, somewhat expanded his views upon the causes and treatment of spinal curvature, which were originally brought before the profession in the pages of THE LANCET. The first two chapters of the new edition remain as in the last one; but the author has improved the next chapter, on lumbar curvature, by entering at greater length into the effects of habitual obliquity of the pelvis from any cause, and by giving illustrations of the effect of a shortened lower limb and of awkward modes of standing. Whether Mr. Barwell is justified in connecting lateral curvature with irritation of the female pelvic organs, and in speaking of "uterine curves" of the spine, we are not prepared to decide. At page 76 the author recommends the surgeon to look along the spine from above in order to appreciate the degree of rotation of the vertebræ, and at p. 78 are some bird's-eye views taken in this way, the lowest of which we will venture to criticise in so far as to express a belief that, with rotation to the right to the amount depicted, the left breast would be very much more prominent than it is represented.

The treatment recommended by Mr. Barwell is the same as before, and in his own hands appears to yield most favourable results, though the number of cases quoted is very limited. First, and most important to our mind, is the "sloping seat," an ingenious method of counteracting lumbar and dorsal curves due to obliquity of the pelvis, which undoubtedly is efficacious in many instances. Next are calisthenic exercises, for which the author gives ample instructions, especially directed to overcome the injurious action of the serratus magnus—a muscle to which Mr. Barwell attributes all "respiratory curves." Lastly is a special "oblique" bandage, taking its points from the shoulder and hip of the sound side, and tending by its elasticity to act upon the displaced ribs and spine. Mr. Barwell is by no means sparing of his criticism on other methods of treatment, and specially that ordinarily adopted by "spinal supports," and he must, therefore, not fear a little criticism himself. His bandage has the advantage of lightness, but in principle is intended to act exactly as the ordinary spinal support does—by pressing against the distorted ribs. It has, however, it seems to us, the drawback of making simple traction without any pressure forwards, and its action must thus be less effective than of a properly-fitted metallic plate. At the same time the pressure on the arm and hip must be very considerable if the tension is really kept up, and would tend, we should fear, rather to draw the two points of attachment together, and thus increase the evil the bandage is intended to cure. We are quite ready to give Mr. Barwell the credit of showing how slight cases of spinal curvature may be scientifically treated and kept out of the hands of the instrument-makers, but shall venture to doubt whether confirmed cases can be cured by these methods—such, for example, as the one shown at p. 80—until the author brings before the profession casts of the patients before treatment to compare with their present condition. A paper, read before one of the medical societies, and illustrated in the way we have suggested, would best advance the cause which we are certain Mr. Barwell has at heart.

OUR LIBRARY TABLE.

The Journal of Anatomy and Physiology. Conducted by G. M. HUMPHRY, M.D. F.R.S., and WM. TURNER, M.B. No. VII. Nov. 1870.—The present part of the *Journal of Anatomy and Physiology* contains an unusual number of articles, many of which possess great interest. Amongst them we may refer to a careful description by Mr. Atkinson of Leeds, of the Osteology of the extraordinary little Edentate, Chlamydophorus truncatus, or Pichichego, with its singular pelvic shield. A paper with conclusions at variance with those of former experimenters by Dr. Ransome on the Loss of Solid Matter during the Germination and Early Growth of Plants; essays on the Homologies of the Mesial and Lateral Fins of Osseous Fishes, and of the Shoulder and Pelvic Girdles, by Dr. Humphry; a psychico-physiological paper, by Prof. Cleland, on the Seat of Sensation; two short papers, by Prof. Turner, on Topographical Anatomy; Researches on Cystine, by Drs. Dewar and Gamgee; Experiments on the Rate of Flow of Blood and some other Liquids, through Tubes of Narrow Diameter, by Drs. Duncan and Gamgee; and a paper by Prof. Traquair on the Cranial Osteology of Polypterus. In addition to the usual excellent Reports of Progress in Anatomy and Physiology, is a special one by Dr. Moore, on Recent Dutch and Scandinavian Contributions to Anatomical and Physiological Science. Altogether a very creditable number.

New York Medical Journal. No. IV., Vol. 12. November, 1870. Edited by EDWARD S. DUNSTER, M.D. New York: Appleton and Co.—Among the numerous records of medicine and the collateral sciences published in America the above journal occupies a high position, and deservedly so. There is often, we think, a considerable difference in point of interest and merit between some of the monthly numbers as compared with others. That for the present month strikes us as good; and our readers may be glad to have their attention directed to an instructive paper on "Syphilis of the Nervous System," by E. L. Keyes, M.D. New York City, which forms a clinical study, chiefly in regard to diagnosis and treatment, founded on the cases of Prof. W. H. Van Buren, M.D., and those of the author of the article.

Lessons in Elementary Physics. By BALFOUR STEWART, LL.D., F.R.S., Professor of Natural Philosophy, Owens College, Manchester. London: Macmillan and Co. 1870.—This is one of Macmillan's excellent series of school class-books, of which, by the way, we take Professor Huxley's volume on Physiology to be the type of what such books should be. The author has aimed at arranging the various branches of the subject so that the student may perceive the connexion between them, for many particulars of which method he expresses himself indebted to Professor Tait. The various active agents, heat, light, electricity, &c., are regarded as varieties of energy, the laws of energy forming, as it were, the thread upon which the various divisions of the subject are strung together. Without pretending to have read this little volume through, we think that we can express an opinion of its merits, as far as the clearness of the author's style and his methods of treating the various subjects are concerned, from having subjected it to the best test we know of. A schoolboy, who knew something of mathematics and physics it ought to be said, was told to

read through some of the parts we had selected, after which he was questioned on these, and he had not only gathered a good deal of information, but his remarks and queries proved that his attempts to grasp the subject were alike creditable and successful. *En passant*, we hope that we may have to congratulate Dr. Balfour Stewart, its author, on making a good recovery from his lamentable accident.

Geography in its Relation to Physical Science. An Inaugural Lecture delivered at Bedford College, London, October 12th, 1870, by WILLIAM HUGHES, Professor of Geography, King's College, London, &c. London: Longmans, Green, and Co. 1870.—This lecture costs sixpence, and is decidedly worth the money. What the Germans term *Erdkunde*—earth knowledge—is but little taught at schools, and especially in girls' schools. Instead of attempting to proceed on a philosophical basis, which is capable of rendering geography an interesting study, geography is too commonly made up of a host of dry details about particular countries, rivers, or places, which are committed to memory, but might just as well have never been learnt at all. Of course all professors think their own subjects the best and most important, but Professor Hughes has so good a one to discourse upon that we cannot wonder at his having delivered a capital lecture, such as this really is.

Zigzaggings amongst Dolomites. London: Longmans, Green, and Co. 1870.—This is a very amusing volume. It forms a pictorial diary representing the travels of a party of friends; and those who have been over all or some of the same ground will recognise the fidelity, grace, and humour of the sketches. On turning over its pages, with the numerous sketches on each, we could not help thinking what a capital book it would be for the waiting-room of a consulting man. Waiting for one's turn to be ushered into the presence of Sir A. B. or Dr. C. D. does not form a pleasant reminiscence in the life of a patient; but there is no reason why the ante-room should be made extra doleful by a host of big volumes which there is neither time, taste, nor opportunity for reading. Why not have illustrated works like "Zigzaggings amongst Dolomites" on the table, which can be taken up at any time and will amuse anyone?

Letts's Medical Diary for the year 1871; *Letts's Appointment Diary; Letts's Monthly or Professional Diary, &c.* London: Letts, Son, and Co.—The publishers of the above diaries have been good enough to forward us a sample of their handiwork. We have on previous occasions dwelt upon the ingenuity, skill, and painstaking displayed by Messrs. Letts in the preparation of these works to meet the requirements of medical men. These diaries are, we may presume, well known; if not, they deserve to be, for they are calculated to give a good deal of useful information, and save a large amount of labour to practitioners, whether general or consulting. It is sometimes said that medical men, although they show great energy, are often unmethodical and unbusinesslike in their habits. All we can say is, they ought not to be, for Messrs. Letts have done all in their power to simplify the registration and arrangement of the business details connected with practice.

The Chemists' and Druggists' Almanac for 1871. London: *Chemist and Druggist* Office.—This is a useful almanac and diary for those for whom it is specially designed. It contains many miscellaneous items of information and intelligence, and a few pages on "Pharmaceutical Chemistry, 1870," by Prof. Attfield, that are worth reading.

The City Diary and Almanac, published by W. H. and L. Collingridge, has ample space for daily entries, upon good paper, and the blotting-paper with which the diary is interleaved is a very useful feature.

REPORT
OF
The Lancet Sanitary Commission
ON
RELAPSING FEVER IN LIVERPOOL,
AND ON THE
GENERAL SANITARY CONDITION OF THE TOWN.

No. IV.
THE INTERIORS AND THE PEOPLE.

AT the first glance the courts of Liverpool appear to be greatly superior to those of London, particularly when they are visited in the afternoon, after the public scavenger has emptied the trough waterclosets, flushed the drains, and swilled down the pavements. There are none of those wretched wooden structures which are to be seen in Holborn or Whitechapel, and everywhere the level pavement of Yorkshire flagstone gives an air of cleanliness which is altogether wanting to pebble pavements worn into holes by the traffic of centuries. Here and there in Liverpool the houses are in a dilapidated state, but there is an absence of those positively dangerous dwellings which, as in London, fall so suddenly and overwhelm the inmates. Moreover, the improvements which have been made by the corporation are so obvious, and the evidences of good sanitary supervision so manifest, that the visitor begins to doubt the possibility of finding any defects whatever. It is only at night that the delusion vanishes, when, with the assistance of an inspector's bull's-eye, the visitor finds himself groping round the dark corners, and sees undoubted evidences of filthy and degrading habits on all sides. And when he steps into the interiors, then for the first time he discovers what whited sepulchres they are; then he recognises the chief cause of the continuously high death-rate, and he wonders no longer that epidemics spread like wildfire.

It is difficult, if not impossible, to convey a true idea of Liverpool interiors. The houses are often occupied from cellar to roof by families in every room. In the cellar those wretched creatures hide for shelter who are unable to pay for lodging elsewhere. They lie upon the damp floor, often without covering of any kind, or fire or light. There are 25,000 empty cellars from which they may select their lodging, and, when driven out of one, they readily find another, with or without the connivance of the tenant of the house. Notices to quit were served last year on 3274 of the inhabitants of illegally occupied cellars. Fines are useless, imprisonment is vain; for there is a form of poverty which can neither be coaxed nor coerced. But there are, also, upwards of 6000 cellars which are occupied by permission of the law. These are selected according to certain rules, which admit, however, of very large exceptions. In a street of fifty houses, only a single cellar was found licensed for occupation, not because it was better than the rest, but simply because it had been occupied for thirty years by an aged married couple, and was admirably kept. Dr. Trench wisely recognises the fact that good habits will overcome all difficulties and mitigate all structural defects. But, ordinarily, the occupants of cellars are in a wretched state. Many of them have neither bedsteads nor bedding. They sleep on the floor beside the drain in the corner of the room. They belong to the very lowest class of labourers—men whose average earnings do not amount to more than 10*s.* a week, the half of which is spent in drink. Here, too, is to be found the widow whose husband succumbed to typhus fever six years ago, leaving his four little children to starve on her labour and the parish allowance of half-a-crown a week. What wonder that the eldest boy can only earn 5*s.* 6*d.* a week, although he is seventeen years of age!

that the second is a cripple; that the younger ones are starving and in rags; that she owes the landlord nearly £1 for rent of the wretched hole she lives in; and that relapsing fever should attack them all.

But bad as are the cellars, the state of things grows even worse as we mount the house from room to room, until the climax is found in the attics, where there is neither fireplace nor ventilator to let out the fetid air. Here, at night, drunkenness and dirt, wretchedness and rags, beggar description. It has been officially ascertained that more than half the inmates of the sublet houses are habitual drunkards. And yet they do not appear to be drunkards of an ordinary type. It is not for pleasure or excitement that these people drink: it is for very life. The pestilential atmosphere depresses the nerves and rapidly destroys the appetite. It is upon drink they are compelled to work. Drink is their clothing, drink their only comfort; and but for drink they most assuredly would die like their children. Alcohol is the only antidote to the compound ethereal essence of nastiness they are compelled to breathe. The air is redolent of damp foundations, broken sewers, and human ordure. It is polluted with odours of filthy persons, foul rags, and stinking fish. The very walls exhale a stench of vermin and contagion, which whitewash hides for a day or two, but does not in effect remove; and the visitor unaccustomed to the depressing influence is compelled by repeated attacks of sickness to retire. In not one room in ten is there a bedstead; in not one a wholesome bed. The inmates sleep, or rather lie, upon the floor, from which they are separated by a bit of straw or a bundle of dirty rags. Not one in twenty takes off either boots or clothes. The drunken slumber off their drink; the sober lie restless and awake. Restoring rest there is none. Mothers and sons, fathers and daughters, brothers and sisters, relations and strangers of both sexes lie indiscriminately together, many of them all but naked, locked in each other's arms for warmth. And rags are everywhere: on the people, on the floor, on the scanty bench or broken box, on lines above the head and on nails upon the wall, on chairs before the fire when there is one; in all stages of decay, in all degrees of filth. And dirt, black and fetid, is on the floor, the walls, the ceiling, and the persons of the inmates. Foul and dishevelled is the hair and grimy are the faces; for there are no washbasins, no hair-brushes, rarely a broken comb. The water is kept outside to wash the cresses, vegetables, and fish, which, after being steeped in the poisoned atmosphere throughout the night, will be sold to their betters and converted into drink. This is a true but feeble picture of thousands of houses in Liverpool; and they are used chiefly to pass away the time between the closing of the public-house at night and its opening in the morning. What wonder is it that the children die, the young droop, and the adults drink.

Such, then, is the condition of the victims of modern social chaos and of ages of State neglect. Do the inhabitants of Liverpool realise the danger? and if so, what are they doing to bring about improvement? Let us examine, and give them all the credit that we can. Liverpool is the only town in which a genuine attempt has been made to carry out Section 35 of the Sanitary Act of 1866—an Act which was expected to accomplish wonders for the labouring classes, by removing nuisances, diminishing overcrowding, and stamping out diseases of a contagious character. The section alluded to enables the sanitary authorities to register and inspect all houses let out in lodgings or occupied by members of more than one family, to measure the rooms, to determine the number of inmates, &c. To carry out the law, Liverpool has been divided into eight districts, each in charge of an inspector subject to the medical officer of health. The bye-laws order 300 cubic feet for each adult in sleeping-rooms, and 350 cubic feet in rooms which are occupied both by day and night. Every floor must be swept daily, and washed once a week. Every window is to be opened daily for an hour, unless the weather is tempestuous, or there is illness in the house. The landlord or agent is to whitewash the premises twice a year. These regulations read extremely well in an Act of Parliament, but, in proposing to give effect to them, Dr. Trench warned the public of Liverpool against the hopeful delusion "that mere statutable laws, however stringently or honestly enforced, or mere sanitary inspections, however regular or continuous, will be able by themselves to check the evils of overcrowding"; and he most wisely appealed "to public opinion for support, and to the corporation in particular for efforts to increase the house accommodation so urgently required by the working classes of the town." The officers in Liverpool visit alone by day, and in pairs three or four nights a week, between the hours of 11 P.M. and 2 A.M. There were at the beginning of this year 7539 sublet houses on the register, containing a probable population of nearly 60,000 souls. Last year the inspectors paid 55,190 visits in the daytime, and 9365 at night.

Now, in proceeding to judge of the effect produced, it is necessary to bear testimony to the great judgment with which the law has been administered under the direction of Dr. Trench. Anything like an exact or harsh interpretation of the rules laid down would have aroused a fatal opposition. The possibilities have been prominently kept in view, and the officers confine their attention chiefly to gross violations of the law, and shut their eyes to a vast amount of evil which no legislation or inspection can prevent. Thus, amongst the 25,000 rooms which are subject to inspection, there are 1132 unfit for the accommodation of more than one person; and yet, for the want of a few hundred cubic feet it would be impossible to tax two occupants with overcrowding. Half the rooms in the registered houses are unfit for more than two persons; and if any of these were found to be occupied by a man and his wife, with one or even two small children, remonstrance would be made, but the charge of overcrowding would certainly not be pressed. The leniency with which the Act is worked is proved by the fact that only 867 rooms were reported in 1869; but so great was the evil in these cases, that each individual had only 197 cubic feet of space. Only 549 persons were actually brought up for judgment, and only 479 of these were fined, and to an extremely moderate amount. But it is also necessary to observe that the number of visits paid by the officers is not, and never can be, sufficient to enforce any very strict observance of the law. It is impossible to suppose that the visit of an inspector to any sublet house once in six weeks has any very marked effect upon the habits of the inmates. He tells them that they are required to open the windows and sweep the floors daily, and to wash the latter once a week; but it is no part of his duty to see it actually done, except in very extreme cases. Such a dragooning into habits of cleanliness would probably be met with very violent opposition; in fact, the chief object of the inspector's visit is to ascertain whether there is gross overcrowding, and to bring the moral force of the law to bear as strongly as the particular case permits. It will be observed that the number of night visits is small as compared with those by day. But it is at night that the best work is done. The day visits afford small information as compared with those at night. It is easy to make excuses for overcrowding in the day-time, when visitors and friends step in; but at night the inmates are actually seen asleep, and there is no denying the condition of the room. And yet if the night inspections were to be carried out much more energetically, we are convinced that resistance would be made. It is no joke to have your slumbers aroused at two o'clock in the morning by the successive knockings at half a dozen doors in the same court, and to turn out of bed to open the door to the inspector, that he may overhaul the different rooms, and count the inmates. Deep, if not loud, are the curses of the half-drunken savages on such occasions, and it is perhaps a happy circumstance that want and disease have subdued their passions, and impaired their powers of resistance. It is obvious that such a system of nocturnal visitation could never become general.

But in estimating the possible operation of this section of the Sanitary Act, it must be further borne in mind that it is practically impossible to apply it as a general rule. We believe that Dr. Trench has pushed it as far as public opinion will allow him. We are convinced that any attempt to extend its operation would arouse the opposition of the owners of small property, who exercise very powerful influence in the election of the municipal authorities. There are certainly over 60,000 houses in Liverpool which might be legally placed under inspection, a fact which shows how

impossible it is to deal with the question of overcrowding exclusively in this way.

We do not, however, wish it to be supposed that the operation of the law is useless; on the contrary, from the evidence we have been able to obtain, its operation in Liverpool has been decidedly beneficial. But we are convinced with Dr. Trench, that "all efforts to prevent vicious overcrowding will be fruitless unless further and larger provision be made for the accommodation of the working classes, and that Liverpool, notwithstanding all that has been done for sanitary improvements, will continue to show a high death-rate until the difficulty be fairly and boldly met." Meanwhile it appears to us that there is a great danger lest too much reliance should be placed on official interference. We observe a tendency on the part of some persons, and particularly in the local press, to put the blame of Liverpool's unhealthiness upon inspectors and officials, forgetting that these authorities are utterly unable to produce any marked mitigation of the evils which prevail, no matter how great their energy and zeal. The remedy must be looked for in a totally different direction. The first essential is that on all sides and amongst all classes there must be a better appreciation of the evils which we have endeavoured to set forth. Let the Health Committee depend upon no one but themselves: the thing is clear enough if they will use their common sense. Let each member take his turn with the borough engineer and see the condition of the sewers; and let every member go round with the night inspectors in order to realise the appalling condition of the people and their homes. Let every member report on what he sees, so that the whole community may be imbued with the conviction that action is required. Nor let the guardians content themselves with the mere administration of relief, which is after all a delusion and a snare. Let them visit the recipients and convince themselves how often their assistance is worse than thrown away. Let them show up the fact that pauperism fattens on epidemics, and that rates go to pay the rents of houses which manufacture paupers faster than they can be relieved. Let the clergy arise, also, to the estimation of the folly of preaching to savages to whom religion must of necessity be a mockery, and morality a farce. Let them cry out that charity relieves in vain—nay, that, as generally exercised in its vicarious form, it helps to maintain the evil. Let the advocates of education speak and warn the ratepayers that a compulsory education law will be equally impotent as a compulsory sanitary law, whilst the people remain in such an abyss of misery. It is impossible to educate a starving and physically degraded people. Let them, therefore, tell the ratepayers that without better dwellings their energies will be wasted and the public money thrown away.

It is only by the creation of a healthy state of public opinion that the evils of Liverpool will be met; and it is to be hoped that the costliness and danger of repeated epidemics will help to form it. Then will be seen the importance of providing barracks for the accommodation of the single of both sexes, in which the inmates shall be taught, as in a school, to loathe the present wretched houses and mode of life, and to acquire habits of cleanliness, comfort, morality, and industry—accomplishments quite as necessary as those of the "three Rs." Then also will the public-house question assume its true importance; and then it will be seen to be a crime to build or let unhealthy dwellings.

Our task is for the present done. We are very sensible of the imperfection of these reports. We have been compelled, by want of space, to present facts and opinions without those qualifications and illustrations which sanitary subjects eminently require. But we claim to have had only one object in view—namely, the fair and impartial elucidation of a difficult and complicated question, with the view of assisting the public to come to a just judgment.

OUT-PATIENT REFORM AT HOSPITALS AND DISPENSARIES.

THE Committee appointed to report on the reform of the Out-patient Departments met at the Hospital for Women, Soho-square, on Friday evening, the 16th inst., Dr. Meadows in the chair.

Dr. HEYWOOD SMITH brought up a report on the Dispensaries of the Metropolis, which was ordered to be circulated amongst the members of the Committee.

The Committee then resolved that it would be desirable to have a special meeting of the Committee to consider the questions—(1) of payments by patients; (2) of payments to the members of the staff; (3) of the establishment of provident dispensaries.

Dr. STALLARD gave notice that he would move the following resolutions in reference to these subjects:—

"1. That the principle of accepting small payments from patients at the time of their attendance at hospitals and dispensaries ought not under any circumstances whatever to be countenanced,—such a practice tending, first, to unfair competition with medical men who are willing to attend the poorer independent classes on terms suitable to their means; and, secondly, to seriously interfere with the introduction of provident dispensaries; it being most unlikely that the poor will make small payments during health, if at a neighbouring hospital or dispensary they can secure, when ill, advice and medicine by immediate payments not greater than those which must be made at provident dispensaries when they are also well.

"2. That it is desirable that the dispensaries should be converted into provident dispensaries, particularly as this can be done without injury to the class of necessitous poor who are not absolutely paupers. The subscribers to the present dispensaries can pay the entrance fee demanded of patients when they are actually ill either by means of a ticket or direct payment, such patients undertaking to become permanent members. The subscribers will thus have it in their power to relieve the present distress, and in doing so will promote habits of providence amongst the labouring poor.

"3. That in order to promote the extension of provident dispensaries, it is desirable to restrict gratuitous advice and medicine to public hospitals provided with beds; and that all such hospitals should be requested to carry out the recommendations adopted by this Committee with the object of diminishing abuse.

"4. That it is not desirable to pay the staffs of dispensaries not conducted on the provident principle."

The Committee adjourned to Friday, the 6th of January, when the members are requested to meet at the Board-room of the Hospital for Women, Soho-square, at 8 o'clock P.M.

DISEASES AMONG ANIMALS.

WE are in receipt of no further reports of cattle plague in Belgian Luxembourg, and are therefore again entitled to hope that its progress has been arrested by the prompt action of the Belgian Government.

Cattle plague is at present reported to exist in *Austria*, in the provinces of Transylvania and Galicia; in *Belgium*, in the districts of Jamoigne and Bloid; in *France*, in Alsace and Lorraine, Seine and Marne, the Ardennes, and the Moselle; in *North Germany*, in Prussia, Rhenish Prussia and Brandenburg, in Pomerania and German Lorraine; in *South Germany*, in Bavaria, Baden, and Würtemburg; in *Russia*, in Poland, places opposite East Prussia, and at Riga and its vicinity; in *Turkey in Asia*, on the north-east coast of the Black Sea; in *Turkey in Europe*, in Thessaly and Roumania.

Pleuro-pneumonia exists, abroad, in Holland, North Germany, and Turkey in Asia; at home, in thirty-six counties in Great Britain.

Foot-and-mouth disease exists, abroad, in North Africa, many parts of South America (especially on the north of the Rio Nigro, and on the side of the river Uruguay), in Denmark, France, Italy, and the United States; at home, in sixty-three counties of Great Britain.

Sheep-pox exists, abroad, in North Germany, and Italy; there is no report of its existence at home.

Sheep-scab prevails, abroad, in North Germany, and is reported to exist at home in thirty-three counties of Great Britain.

Besides the above-named diseases, others are said to be raging in various parts of the world, notably in Texas; cattle-plague in Virginia, splenitis in Prussia, and fatal diseases among horses in Italy, Russia, and Sweden.

THE LANCET.

LONDON: SATURDAY, DECEMBER 24, 1870.

IT is very discouraging that we seem to be in for a very severe and extensive epidemic of small-pox. It was estimated by a member of the Metropolitan Asylums Board a week ago that there were about 600 cases in London; and special accommodation for only 200. This was exclusive, we presume, of the accommodation of the Small-pox Hospital, which has 100 beds, and is quite full. In Mile-end-road Workhouse there were no less than twenty-three cases. The deaths in London are at the rate of sixty a week. It is depressing to be in this plight with such a disease; for we cannot help asking ourselves the question, if such mortality as this is to be happening at intervals of three or four years from a perfectly preventable disease, what is the chance or hope of our being delivered from the scourge of diseases that are not so preventable? It is very clear that where a disease is at once so prevalent and so preventable somebody must be to blame. It is very important that we should draw accurate conclusions as to the blame to be assigned to different parties. All the data upon which to form a just judgment in the case are not before us; but we may safely conclude that the principal blame rests with one or other of four parties: the public, a group of noisy stumpers who style themselves the Anti-Vaccination League, boards of guardians, and the Privy Council. The matter is very urgent. With small-pox in workhouse infirmaries, three or four hundred cases of small-pox being treated in private houses, chiefly of the humbler sort, and with a good deal of communication, through our omnibuses and cabs, between the small-pox patients in the hospitals and their friends, to say nothing of the conveyance in such vehicles of small-pox patients themselves, the disease will surely spread unless all that private intelligence and public wisdom can do is done.

Let every individual remember that he can, by the simple expedient of efficient revaccination, secure himself against this disease so as to be able to live amongst it unhurt. This is the measure which for thirty years has absolutely and harmlessly protected the nurses of the Small-pox Hospital. A great many of the cases, though very few of the deaths, occur in persons who have been once vaccinated. The effect of even the best vaccination in infancy diminishes with time. People may take small-pox after having had it once. It is not wonderful, therefore, that they should take it after an early vaccination, and probably an imperfect one; for it should be universally known that the more thorough vaccination is the more perfect is the protection from small-pox. A child vaccinated in four or six places is protected four or six times more perfectly than a child vaccinated in one place; though it is only of late years that this has been well established. Hence the occurrence of many severe cases in people who have been vaccinated after a fashion.

Who, then, is to blame for the number of unvaccinated or insufficiently vaccinated persons—in other words, for the non-enforcement of the Vaccination Act? The true answer to this question involves a suggestion of the means by which the present epidemic is to be arrested or curtailed. If we had a wise sanitary despot in power for a month, and a perfect machinery for carrying out his mandates, there would not be another case of small-pox in the country after the lapse of fourteen or fifteen days from the commencement of the despotism. We have not such a despotism. But we have an Act which amounts to a compulsory Vaccination Act as regards children. It does not apply to adults. It is administered by boards of guardians and by the Privy Council. The question is, has it been well and wisely administered? It is pretty clearly proved that the most culpable parties are boards of guardians, on whom, unfortunately, has been devolved the duty of applying and enforcing the Act. Notwithstanding the efforts of the Anti-vaccination League, it has been generally found that where the Act has been firmly applied opposition has melted away, and only a very few fines have had to be imposed. "In Manchester, the head-quarters of the League," says Dr. SEATON, "the inspector has cleared his list of defaulters without a single prosecution." Experience is very much the same in London, Leeds, and other large towns. Small-pox prevails chiefly in those parts of London where the guardians have neglected to do their duty under the Vaccination Act—conspicuously in Bethnal-green and Mile-end, where, as Dr. SEATON puts it, the guardians have shaken hands with the promoters of the so-called Anti-vaccination League. As far as the Privy Council is concerned, while admitting its great labours in regard to this question, we are disposed to think that its action is open to criticism in some respects. Under Clause 8, it has the power to issue regulations authorising guardians to enter into contracts for revaccination, and to pay a sum for revaccination, amounting to two-thirds of the fee payable for primary vaccination. We think this power should have been used more fully than it seems to have been. The fault may be more that of boards of guardians than of the Privy Council. But we cannot gather that the Privy Council has advised and encouraged gratuitous revaccination by public vaccinators, even at this crisis, as it should do. Secondly, it has always appeared to us very doubtful whether the Privy Council acted wisely in reducing the number of public vaccinators. In the district of Mile-end there are only two public vaccinators to a population of 87,000. It is monstrous to think that two vaccinators, having public and private practice to attend to, can do the work of public vaccination effectively for such a population. We believe that a better supply of lymph would be kept up, and that a more extensive vaccination of the poor would be secured, by having a larger number of public vaccinators. The poor are reluctant to go beyond the officer of their own district, to a perfect stranger, for vaccination. And when lymph is in the hands of such a very small number of vaccinators, it is not easily procurable by private practitioners. It is worthy of immediate consideration whether the authorities of the Privy Council should not authorise and recommend boards of guardians to increase largely, if even it be only

for the emergency, the number of public vaccinators. It is certain that the services of most efficient and energetic public vaccinators were discontinued under the present policy of having few to do the work. Lastly, it seems to us that the Privy Council might possibly do something more than it has done in the way of counteracting the fanatical folly of the men who teach that small-pox is a blessing and vaccination an evil. Doubtless this duty devolves more on boards of guardians. But we cannot always look to them for educating people, and enabling them to resist the claptrap of the Anti-Vaccination League.

READ by the light of the official documents and private correspondence that have of late been published, the collapse of the French empire can scarcely be regarded with that wonderment with which it was at first contemplated. So long as the Emperor was vigorous in body and mind, so long as he was served by able and energetic men really devoted to his *régime*, all *appeared* to go on tolerably well; but the day of trial came, and the way in which the Empire tottered and suddenly fell must have taken the breath out of statesmen. As with the Imperial system, so with the military system. Personal government was the mainspring of the one, and the Intendance was the back-bone of the other. To the Intendance duties of the most multifarious description were entrusted, and on it was conferred an amount of power such as no other branch of the French military service possessed. M. CHENU was awarded by the Institute of France its prize for his surgical statistics of the Franco-Austrian war of 1859. He pointed out the great numerical insufficiency of the army medical staff, and lamented that the terrible scenes after Magenta and Solferino had failed to open the eyes of the Administration to the condition of all that related to the French medical service. M. LABOULAYE, M. LEFORT, and many others, called attention, but called in vain, to the deplorable defects of the French medical organisation, with its officers tied and bound by the Intendance.

It is said that the Control System introduced into our own army has been moulded on the principle of the French Intendance. If so, we cannot prophesy that good things will come of it when it has to be tested in any campaign on a large scale. Fortunately, we manage to rectify our blunders by dint of spending enormous sums of money, generally at the cost of much suffering, and sometimes of disaster. We earnestly hope, however, that it will never come to pass that our army has to take the field with its medical service subordinated to the Control Department in the same way that the French medical service has been fettered and controlled by their Intendance. With the experience of America and Germany to guide us, it is to be hoped that our army medical officers will possess some power of independent action in the management of their own affairs.

By the despatches discovered at St. Cloud, it is now manifest that before the war had opened, even, there was a dearth of the necessary provisions and stores at Metz; and the discovery of this fact was enough to have paralysed the Emperor of the French and his generals. Of the failure of the organisation in Paris as regards the ambulance system we have been lately told by *The Times* correspondent. English officers who were present at the two great engagements of Nov. 30th and Dec. 2nd bore testimony to the fighting qualities of the French, but declared that they had never in their lives witnessed such muddle and confusion as existed in the rear. Forty thousand beds were in readiness for the wounded. The conflict was at the gates of the city. But the arrangements for transferring the wounded from the battle-field to the hospitals completely broke down. A dozen ambulance societies were acting, not in concert, but in rivalry of one another; and the multitude of sick attendants made "confusion worse confounded." If ever we must go to war, let us have, at any rate, a sufficient number of medical officers with administrative experience to guard against a similar state of things.

IN our article of a fortnight back we referred to the present unsatisfactory state of the Naval Medical Department; and we have now to give the authorities a few suggestions, which would, if carried into effect, tend greatly to popularise the service.

The first is the abolition of the title of "assistant-surgeon." Every candidate for the public medical services must be a doubly qualified practitioner, and must, in addition, pass a special examination, which, if he were about to practise on land, would not be requisite. Such a man is surely a "surgeon," and should receive his title as much as a chaplain or a naval instructor, who, though no older and with no more special claims to the exemption, takes at once the full title of his office. The old plea, that if all the medical officers of a ship bore the same rank there would be no subordination, is sufficiently disproved by the fact that the numerous recent appointments of surgeons in lieu of assistant-surgeons have in no case led to difficulty or disagreement.

The next most important matter is that time of service only, irrespective of age, should count for retirement. Curiously enough, we have received a letter from a naval surgeon complaining of the regulation which already makes this rule apply to officers entering the service after the age of twenty-five as a hardship; whereas this is the thing to be desired for all members of the department, and not merely for the few (of whom we presume our correspondent to be one) who happened to enter late in life.

Lastly comes the standing grievance, that surgeons, unlike chaplains and paymasters, cannot by any length of service reach a rate of retirement above £400 per annum. If their Lordships are wise, they will by a stroke of the pen transfer the staff-surgeon from the £400 to the £450 list, for nothing less, we are certain, will restore a healthy feeling to the department.

Whilst pressing for these and other needful reforms, we can assure the Admiralty that the medical profession is not unmindful of what has been done for them, and but a slight increase in the attractions of the service is wanted to bring recruits to it. We rejoice the more, therefore, to hear that there is a probability of an arrangement being shortly carried out by the naval and military authorities, by which the school of instruction at Netley will be open to the medical officers of the Royal Navy, as well as to those of

the Army. Nothing, in our opinion, would do more to raise the professional status of the Naval Medical Department than its being thus assimilated in all respects with the sister service; and we trust that no false motives of economy will arise to mar a scheme which reflects the greatest credit on the Director-General of the Navy.

THE subject of consanguineous marriages has recently been once more discussed, from a physiological point of view, by the accomplished naturalist, MANTEGAZZA. The conclusions at which he has arrived (as we learn from the *Echo Belge*), and with which we are by no means disposed to concur unconditionally, are, that although the alliance of relatives in marriage is not necessarily or invariably injurious to the progeny, it is probable that, upon the whole, it is less favourable than the marriage of strangers; and he declares he has in his possession facts that show the result is bad in the proportion of four to one. He acknowledges, however, that this estimate is exaggerated, or at least does not admit of general application. The real cause of the ill-effects upon the health of the progeny, there can be little doubt, is the intensification of any existing proclivity to disease, or, as MANTEGAZZA expresses it, the multiplication of morbid germs of the same kind. But such marriages are shown to be unfavourable, he thinks—and here we are disposed to join issue with him,—quite independently of any hereditary disease, by the frequency with which sterility and abortion occur, and also by the manifestation of diseases in the offspring that have not been previously observed in either branch of the family tree. The observations that have hitherto been made, and with which he is acquainted, though we think there is a lack of reliable evidence on the point, demonstrate that the most serious, frequent, and best-established ill-effects of the marriage of blood-relations are sterility, imperfect conception, abortion, monstrosities, and disposition to certain diseases of the nervous system, in the following order of frequency:—Epilepsy, idiocy, deaf-mutism, paralysis, various cerebral affections, as incomplete development of the intellectual faculties, a susceptibility to moral suffering, the establishment of the scrofulous and tuberculous diathesis, diminished power of resistance to disease and death, great mortality in infancy, a peculiar kind of dysmenorrhœa, attributable to no other cause, and very rebellious to treatment, feebleness in the affairs of life, and, lastly, retinitis pigmentosa. The danger augments for the descendants in proportion to the nearness of relationship between the parents.

But there is also a brighter side to the question. We can imagine a hard-working student, as he follows the graceful movements of some young beauty, who, with the ruddy glow of health on her cheeks, half invites and half repels his attention, saying to himself, "Shall I marry my pretty cousin?" And we opine that, where the cousin is very healthy and very pretty, and where our young friend has not wasted his substance, like the prodigal of old, in riotous living, no harm nor evil will come of it, if his suit be successful—always remembering that the essential points in favour of such an alliance are health and easy circumstances, with the absence of hereditary disease, and especially of scrofula and nervous affections on both sides; and that the chances are better the less similarity there is in physical as well as in moral features between the two parents. According to MANTEGAZZA, the probability of defect in the offspring augments with the degree or closeness of *maternal* relationship, so that the danger of marriage between cousins decreases in the following order: marriage between the children of two sisters; marriage between the children of a brother and sister; marriage between the children of two brothers. Two reasons, he considers, explain this law: the first is that, whether for good or evil, we all inherit more from the mother than from the father; and the second—well, the second, let us hope, is an Italian and not an English one—to wit, that everyone is the son of his mother, but not all are the sons of their fathers.

WE have recently received a communication indicating that about 1000 young persons are employed at the Royal Laboratory, Woolwich Arsenal (many of them being under thirteen years of age), from 6 A.M. until 7, 8, and 9 P.M. This appears to have been going on for the last four or five months, and is, as most of our readers are probably aware, in direct defiance of the Factory Act, which lays down distinctly and clearly that children are not to be employed in any establishment for more than six hours and a half in any one day. It is also plainly declared that children may not be employed to recover lost time, and are not to be kept at work after 2 P.M. on Saturdays. The attention of the inhabitants of Woolwich seems to have been aroused by an inquest on the body of one of these little workers, which took place last month; and since that time the subject has been brought directly and indirectly to the notice of the authorities, having already been made a prominent subject for discussion in many of the daily and weekly journals. Such being the state of things, we may ask, What are Mr. BRUCE and the Home Office about? Is not the Royal Laboratory at Woolwich a factory within the meaning of the Act?—or is it permitted to Government establishments to violate the law, and ruin the health of the working population at pleasure? Have Mr. CARDWELL and Mr. BRUCE made a compact not to meddle with each other's business?—or has the law been broken because some new broom, in the shape of a recently-appointed official, may sweep very clean and very economically? There is, however, in point of fact, no excuse for this proceeding. The exigencies of the service cannot be assigned as a reason, because additional hands for this class of work can always be found without difficulty. The Factory Acts have been passed after much discussion and great opposition; and it is said in many quarters that the success of their working is by no means sufficiently established. But it is a duty that the Government owes to the people to see that the law is not infringed in any public establishment, but, on the other hand, to take special heed that the provisions of all Acts relating to health are scrupulously enforced. We consider it proper to place this subject prominently before our readers, believing that the Factory Acts, if carried out fully and faithfully, would very much tend to advance the sanitary status of the working population of this country.

Medical Annotations.

"Ne quid nimis."

THE WEATHER AND THE CAMPAIGN.

THERE have been many wonderful facts connected with the awful struggle taking place on the continent. We all know what bitterly cold weather we had at the beginning of the present month. The sufferings of the wounded must have been very great, and from all we can gather, tetanus was not at all uncommon among those who had been exposed on the field of battle to the severities of the climate. Nothing can be more harrowing than the description given by Dr. Russell of the fate of the unfortunate French officer who was shot through the body during the late sortie from Paris, and left bleeding upon the field exposed to the bitter cold for days and nights, in consequence of which, gangrene of the lower extremities ensued, which subsequently caused his death. Nor can this be an isolated case, for there must be many indeed similarly circumstanced. Although it can serve no good purpose to dwell upon the sufferings endured by this poor fellow, it is impossible to shut out from our thoughts the contrast between the comfort and happiness of family groups gathered round the Christmas hearths in England, and the pain and sorrow of those engaged in this wretched war. After the battle of Artenay, and in the subsequent retreat of the army of the Loire, both the German and French troops had to bivouac in the open without shelter of any description, the temperature being several degrees below freezing point. Huge fires of unthrashed wheat-straw add their quota of blaze to the burning villages, and the heavens are aglow with ruddy light. Round these fires are grouped crowds of soldiers, unable to do more than take short naps on account of the cold, and constantly making short pilgrimages between the straw in which they try to bury themselves when they sleep and the straw at which they endeavour to warm themselves when they are awake." In addition to the miseries arising from the cold, the column bringing the provisions had not arrived at midnight, and the German advancing force seem to have suffered also hunger and fatigue Still, we hear but little of disease; and the relatively small amount of sickness present among the troops, considering the circumstances under which they are placed, forms one of the most striking features of the war. It is, however, the alternations of temperature and the occurrence of heavy rains that generally tell with such effect on the health of men on field service. Every day that the war is prolonged the difficulties are increased of provisioning the immense forces in the field, and there can be no doubt that the sufferings of the troops, great as they must be at the present time, will be vastly augmented if France continues to hold out. Christmas will be a time of severe affliction to thousands in France and Germany.

DYSPEPSIA TREATED WITH RAW MEAT.

So common is dyspepsia that, according to Chomel, a fifth of all his patients were affected with it. Nor is this extraordinary when it is remembered that when the digestive system loses in some degree its vigour and activity, the other functions are irregularly and languidly performed: the reparative materials soon become defective in quantity and quality; the blood becomes poor, loses its plasticity, and circulates through the several tissues without nourishing them; the constitution begins to be profoundly disturbed; and soon upon the primary dyspepsia are grafted gastralgia, anæmia, chlorosis, nervous affections—in a word, every affection that arises from and again reacts in producing a defect of vital resistance. The danger is great unless the treatment be appropriate. What has been held to be appropriate has varied from time to time: now bitters, then tonics, and now again ferruginous compounds. Sometimes alkalies have been regarded as the universal panacea; and more recently pepsine and strychnia have been vaunted as specifics. Still it would appear the really appropriate treatment has to be sought; and our newly established contemporary, the *Echo Belge*, from which we have extracted these remarks, reminds us of the old adage, "*telle nourriture, tel sang*," and adds that such as is the blood so is the force of resistance to the influence of disease. In all such cases it is of the highest importance to supply the economy in the easiest manner with the largest amount of alimentary materials. With this object in view, uncooked meat is especially indicated, and appears to have been somewhat largely prescribed by the French physicians, though the records of its success are comparatively few. To administer it properly it is necessary to attend to several points. The fillet should be preferred, as being the most delicate and the richest in muscular fibrin. It should be freed with the utmost care from fat and tendon. It should be finely minced, and then brayed in a mortar of wood or stone. When reduced to a paste, it should be covered with sugar, gluten, or vegetable gelatine to overcome the repugnance with which it is at first naturally regarded. Some prefer to squeeze out the juice and swallow it mixed with a little rum or orange-flower water; whilst others again make it into boluses, and take it in slightly warmed beef-tea or soup.

THE REGISTRATION OF DISEASE.

THE more this question is ventilated, the more evident does it become that there are ways of obviating most of the difficulties which have appeared to lie in the path of the movement. Take the following for an example. It has been very properly held to be most undesirable to increase the clerical part of a Poor-law medical officer's duties. Yet, without doing so, how was it possible that the valuable information contained in the medical relief books could be made as available as it ought to be for local sanitary purposes; unless, indeed, the relief books themselves were removed periodically from the custody of the medical officers, a proceeding open in many respects to objection? Happily this stumbling-block is now shown to be quite easy of removal, and by so simple a method that one wonders it had not been thought of before.

At the recent general meeting of the Poor-law Medical Officers' Association, Mr. James Lewis, of the Registrar-General's Department, was present on the invitation of the president, and, in reference to the subject of disease registration, propounded a practical suggestion, which strikes us as an effective solution of the copying difficulty. In this mechanical age the tendency is to confine the pen itself mainly to the function of registering original work, and to make use of mechanical means for everything in the way of copying. The copying-press and the carbon paper are two agents of almost universal application as economisers of copying labour; both of them exceedingly simple, though the latter has a wider range of utility than the former. Mr. Lewis therefore suggests that the carbon-paper process would enable the Poor-law medical officers to make one, two, or more copies of their relief-book entries without involving the least additional trouble in the way of writing. The *modus operandi* would be simply this: Every medical officer would have to be furnished with loose sheets, ruled exactly to correspond with his relief book, with a small stock of carbon-paper, in sheets, of the proper size and

with an indelible-ink pencil. Then, placing a ruled sheet in position under the open page of the relief-book, and inserting between the two a sheet of carbon-paper, every entry written on the first page would be found in fac-simile on the second page; and this process would extend to three or more copies, providing the paper were of a thin texture. Some alterations would need to be made in the ruling of the relief-books, and only one side of the paper could be written on. A little practice would soon make perfect any average writer in this method of copying, which in fact is as simple, yet as efficacious, as anything can well be. In this way the medical officers would be able to retain the books in their own possession as long as they might want them; while weekly, monthly, or at any other interval, exact copies could be supplied either to the guardians, to the local medical officer of health, or to any other authority who may have need of them.

THE BRANCH COUNCIL FOR ENGLAND.

AT the meeting of the Branch Council for England on the 15th instant, the following official notification was read:—

"July 14th, 1870.—We, the Royal College of Surgeons of England, in pursuance of the power given to us by the Medical Act, do hereby appoint Mr. Richard Quain to be a Member of the General Council of Medical Education and Registration of the United Kingdom, for the term of five years from the 14th day of July, 1870. In witness whereof the said Royal College of Surgeons of England have caused their Common Seal to be affixed the 14th day of July, 1870."

Our readers will not fail to notice the calm assumption of the Council of the College of Surgeons, and the Fellows and Members have only themselves to thank for thus allowing their corporate rights to be over-ridden for want of their legal assertion.

Two cases of complaint against registered practitioners for improper professional conduct were referred to the solicitor for his opinion. Three petitions to register as medical students were granted, and one refused. It was ordered that Mr. Henry Wells be registered on the ground of his having held an appointment in the army before the passing of the Medical Act; and it was also ordered that Dr. Hugo Senftleben, who had practised as a physician in the United Kingdom before October, 1858, should be registered as Doctor of Medicine and Surgery, Kœnigsberg, Prussia, 1854.

ECONOMY VERSUS HEALTH.

THE Chief Commissioner of Works was good enough, on the occasion of laying the stone of the new General Post Office some few days ago, to expatiate on the exceedingly economical character of the building about to be constructed "for the benefit of the citizens of London, and indeed of the whole kingdom." As utility and thrift are now the order of the day in all Government departments, we have no doubt that the remarks of Mr. Ayrton would be considered by his colleagues as very much to the point. It may, however, possibly be worth suggesting as to whether comfort and ventilation have been considered items worthy the attention of the Board of Works. We are not at all specially disposed to take up the cudgels on behalf of those gentlemen who are, according to popular belief, licensed to play from ten till four, but there can be no doubt that many of the rooms in, and the sites of, our public offices are totally unfit for the occupation of persons who are presumed to exercise mental as well as physical faculties, and should, at all events in an Imperial establishment, have all opportunities afforded them of so doing. Mr. Ayrton and the Board of Works will fail as to their study of economy if, in the erection of the new Post Office, they have not in their designs secured warmth, light, and a proper scheme of ventilation without draughts, and thus (which is, after all, the true economy) at the same time secured a maximum of mental energy with a minimum of discomfort.

ROYAL COLLEGE OF PHYSICIANS.

AT the Comitia Extraordinaria, held on Monday last, the Fellows decided, unanimously, on assenting to Dr. Webster's motion, in favour of an annual publication of the College accounts. It was affirmed that the affairs of the College were prosperous, and that the yearly publication of a balance-sheet was likely to afford much satisfaction to the Fellows.

At the same time another proposition was passed, not, however, without some opposition—viz., that the president should be (*ex officio*) an auditor, along with the censors. It was objected that the president, as possessing a checking power over the treasurers as to the expenditure of sums above £20, ought not to be put in the position of an auditor; and also that, without some further modification of the language of the bye-laws, the president would be a necessary element in the formation of a quorum of the Censors' Board for the purpose of auditing accounts; and that for reasons of his own he might possibly absent himself on purpose to prevent an audit coming on. For the moment, the objection was over-ruled; but although there could be no danger of such an occurrence taking place under the rule of the present president, it does seem that the existing wording of the bye-laws constitutes an anomaly and a possible danger for the future.

DEATH ON THE LINE.

"KILLED on a railway" might now very appropriately be added to the list of causes of death compiled by the Registrar-General, for it is fast becoming a very prominent mode of assisting to clear off our superfluous population. The inspectors appointed by the Board of Trade report laboriously, diligently, and we may add with great ability, on railway accidents as they occur. These reports are duly read, a copy is usually sent to the Company on whose line the casualty occurred, and there the matter ends. It is notorious that the recommendations of the inspectors are in many instances disregarded, though it has been shown clearly that if attention had been paid to them this or that loss of life would not have occurred. The number of persons who in one way or another date a deterioration of mental or physical health from railway accidents is increasing annually to a very great extent. Safety, even in a comparative degree, cannot be attained unless the passengers and the parcels are kept entirely distinct, and a double line of rails appropriated to merchandise as well as to men.

POISON REGULATIONS.

WE are glad to observe that the Council of the Pharmaceutical Society have again decided to recommend to the annual meeting of the Society for its adoption certain specific regulations for the keeping of poisons. It is to be hoped that these, or similar regulations, will be accepted by the body of pharmaceutists as the solution of a much-vexed question. In the discussions which have from time to time taken place on the subject of accidental poisoning, public opinion has expressed itself in unmistakable terms in favour of the enforcement of precautionary measures of the nature of those now just formed by the Council of the Pharmaceutical Society, and which, indeed, are identical with those rejected by the Society last year. The public,

moreover, will not be satisfied until some regulations of the kind are in force.

A large amount of new blood was infused into the Council last year, and in such a way as to make it truly representative of the different interests of pharmaceutists; and it is this Council which calls upon the latter to accept certain alternative and compulsory plans for keeping poisons — viz., in separate "poison" compartments or drawers, or in bottles of a distinctive kind, or in vessels secured in such a way as to arrest the attention of the dispenser.

It is with regret that we still observe in a few persons a spirit of antagonism to the acceptance of any regulation whatsoever for the keeping of poisons. We venture to hope, however, that they will find themselves in a very small minority at the approaching annual meeting of their Society. If the pharmaceutical body allows the present opportunity of legislating for themselves in the matter of the keeping of poisons (and thereby augmenting the confidence of the public towards themselves) to slip, they may find the tables turned against them, and the pressure of public opinion from without subjecting them to enactments of a still more stringent and, to them, even of a vexatious character.

THE LATE PRESIDENT OF THE ROYAL MICROSCOPICAL SOCIETY.

THE Rev. J. B. Reade, F.R.S., and President of the Royal Microscopical Society, died at the Rectory, Bishopbourne, near Canterbury, on Monday last. Mr. Reade was in his seventy-first year, and was well known amongst men of science as a scholar of great attainments and a man of genius. He was one of the earliest photographers, some think the very earliest; he was an excellent astronomer, and while vicar of Stone, near Aylesbury, constructed for himself a fine equatorial telescope, which is, we believe, now at Halifax. He added greatly to the microscope, and studied microscopical science with a patience and perseverance rarely equalled. He was very fond of medical science, and, like his clerical brother Hales, of last century, was eager in physiological research. He preceded Reuling, Viale, Latini, and Richardson, in the discovery of ammonia as a product of respiration, his paper on this subject having been written twenty-seven years ago, and published in abstract at that time in the *Gardeners' Chronicle*.

MILITARY HYGIENE ABROAD.

IT is not a little curious that continental nations should, practically speaking, almost ignore the lessons in military sanitation which wars have taught us, and especially those of modern times. The French and German hospitals were almost invariably overcrowded, and there was not that attention to ventilation that might have been expected. In the case of the *baracks* hospitals, which are, structurally speaking, admirably adapted for the location of sick and wounded men, the same tendency to overcrowding was exhibited; and we understand that in some cases the intention has been expressed of closing the roof-ventilation, in order to protect the patients against the cold weather. Of course draughts cannot be borne with impunity at this season; but it is not to be doubted that a liberal supply of fresh air is essential to the successful treatment of the wounded. To obviate the effects of cold, fires and warm clothing are required, and it is possible that difficulties in procuring fuel may have compelled the surgeons to diminish the amount of interchange of the inner and outer air. As far as the German military surgeons are concerned, they are fully acquainted with all the facts of military hygiene. Prof. Parkes's work had been translated by them shortly before the present war; and the various articles on "Hospitalism," by the late Sir J. Simpson and other notabilities, that appeared in our own pages were extensively read in Germany. The French have, as a rule, always manifested a fear of "draughts" in their hospital arrangements, to the no little detriment, it is to be feared, of the patients. The losses from pyæmia among the wounded have been very large—not that we are by any means desirous of attributing the prevalence of this disease exclusively to overcrowding or defective ventilation,—and the ratio of deaths to sick treated has probably been also large. The German army, though not so healthy as it was, continues to enjoy the same comparative immunity from any epidemic disease that it has hitherto done. As this cannot be ascribed to any unusual degree of attention to sanitary regulations on their parts, we must suppose that it is due to the fact that the German generals have not unduly taxed their men's physical strength, and that the commissariat has been, upon the whole, good.

ASSOCIATION OF CERTIFYING MEDICAL OFFICERS.

THE above Association seems to be in active prosperity, and recently held its third annual meeting in London, under the presidency of Dr. Arlidge, who delivered an address upon the occasion. The certifying surgeons of this country, who are over one thousand in number, have here a centre of action for maintaining and improving the status of their profession, and its usefulness in the administration of the Factory Laws. We have from time to time noticed the half-yearly reports of the inspectors of factories in connexion with the work of the certifying surgeons; and we commend the Association to the notice of those who have not yet joined it. The importance of combination is the more urgent at the present moment, since Mr. Redgrave, one of the inspectors, has proposed to place the control of the sanitary organisation of the country in the hands of the Factory Office; and necessarily therefore the duties of certifying surgeons would, if this plan were adopted, become even more important than at present.

We notice, by the way, that Mr. Redgrave's discourteous refusal to give the Association the names of the certifying surgeons in his district, stands out in strong contrast with the conduct of his colleague, Mr. Baker, whose unwearied and able assertion of the value of professional supervision in the administration of the sanitary clauses of the Factory Act is so appreciated by the members of the Association that they are about to present him with a testimonial. We should mention that Dr. Waters, of Coventry, is the Treasurer, and that Mr. Stansfeld, of Bristol, is the Secretary of the Association.

EVERGREENS FOR HOSPITALS.

THE appeal of the resident medical officers of King's College Hospital in *The Times* of Monday last for evergreens with which to adorn the wards of their hospital will, we trust, lead to all the metropolitan hospitals being amply supplied with holly and laurel for the approaching festival, not forgetting a little mistletoe for occasional and discreet employment. The changes which the last few years have wrought in the wards of most of our hospitals are very remarkable, and the efforts which have been so successfully made to convert bare walls into something resembling, or, at least, reminding of home, are fully appreciated by the poor who seek for aid in these institutions.

At the same time, we venture to think that there is a tendency to go a little too far in these matters, and to forget, in the wish to give pleasure to the nurses and officials of some of our hospitals, that many of the patients are

really ill, and that to crowd them together, even for a Christmas tree, is a doubtful kindness. To give presents to the inhabitants of a children's ward seems to be a natural thing at all times; but it does not appear quite logical that a patient who breaks his leg at Christmas, perhaps from too great an indulgence in the festivities of the season, should be rewarded with gifts which would not fall to his lot if the same accident happened to him at midsummer. We should be sorry to curtail any benevolent efforts on behalf of our hospital patients, but we think there is a growing tendency to carry these matters to an injudicious extreme.

NAVAL MEDICAL PROMOTIONS.

IN the vacancy caused by the retirement of Dr. G. Mackay, Staff-Surgeon Thomas Russell Pickthorne has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets. Mr. Pickthorne's seniority is April, 1866, and he has seen much service in all parts of the globe. Just a year ago he was appointed to superintend the working of the Contagious Diseases Act at Devonport, and this post will now become vacant. We may notice, by the way, that Dr. Sloggett, who succeeded Dr. Leonard as inspector under these Acts, has been granted the honorary rank of deputy inspector.

Four assistant-surgeons have been promoted to the rank of surgeon, and we may notice that one of these gentlemen, the unavoidable omission of whose name from a former list of promotions excited some comment in naval medical circles, has been permitted by the Admiralty to take the seniority he would otherwise have been entitled to.

FACILITIES FOR PUBLIC VACCINATION IN ST. LUKE'S.

THE Guardians of Holborn Union have applied to the Privy Council for authority for their public vaccinators to treat their houses as additional vaccination stations, at which attendance will be given every morning for the vaccination of cases of emergency, during the present epidemic. This application has been made in consequence of the deficient arrangements of the Privy Council which provide for the attendance of the public vaccinator at his station only once a week. On the occurrence of a case of small-pox in a crowded district it is, of course, desirable that no delay should take place in vaccinating unprotected persons, and in revaccinating all who have a doubtful cicatrix, or who desire revaccination. People were found running about to various public institutions because the public vaccinator had no authority to vaccinate at any but the fixed station, or at any other time than that which had been officially announced. We would suggest that the arrangement proposed by the Holborn guardians should be at once adopted in all other districts.

PATENT PILLS, POWDERS, AND PLASTERS.

IT may or may not be satisfactory to know that, according to a Parliamentary return recently published, the revenue derived last year from the sale of stamps for patent medicines amounted to £72,353. But, indeed, Parr, Holloway, and others of their tribe have flourished, and will continue to flourish so long as medical men fail to see the importance of paying attention to the little aches, pains, and discomforts to which flesh is heir. We referred to this subject some time ago, and again counsel both physician and general practitioner not to consider any symptom or physical grievance, however apparently fanciful, too trivial for kindly as well as careful consideration. The number of individuals in all classes of life who consider a daily dose of aperient medicine necessary to their existence is far greater than is generally imagined, and the practice is fed and fostered by the patent medicine system to an enormous extent. If, however, a little more time and trouble were spent in teaching patients what to eat, drink, and avoid, how to clothe, and when to wash, the successors of Widow Welch and Mr. Cockle would flourish less, and professional readers would be benefited both in pocket and prestige.

MEDICAL SALARIES AT TAVISTOCK.

A SPECIAL MEETING of the guardians of the Tavistock Union has been held for the purpose of taking into consideration a letter of the Poor-law Board drawing attention to the insufficient salaries of the medical officers as compared with those of the neighbouring unions. In the Axminster Union, for example, with an area of 61,738 acres and a population under 20,000, the salaries of the district medical officers amount to £453 a year. In the Tavistock Union, comprising 158,567 acres and a population of 35,265, the salaries were only £227. The guardians have made a step in the right direction by raising the salaries to £328; but it is evident that the medical officers are still inadequately paid, considering the very extensive area over which they have to travel.

POLITICS AT HOSPITALS.

WE protest strongly against the introduction of political influences into hospital elections. Nothing is more calculated to do such institutions permanent injury. It is with the deepest regret, therefore, that we learn that the recent election of honorary surgeon to the York County Hospital was determined by overwhelming influences of a political character. At a meeting of the governors it was clear to the most ordinary observer that the Tory party largely predominated, and the *Yorkshire Advertiser* roundly affirms that the members of this party had been got together from the most remote parts of the county to support their favourite candidate, and that the question of fitness did not occupy the minds of the great bulk of the supporters of the successful candidate. If, indeed, political considerations are permitted to exercise any influence upon such elections, we regard it as certain that patronage and subscriptions will fall off; in fact, no man ought to be excluded from professional advancement by reason of the political opinions he is supposed to hold.

WITTON EXPLOSION AT BIRMINGHAM.

THE terrible effects of this disaster are not yet at an end. Forty-six deaths have occurred, seventeen directly from the explosion; and twenty-nine of those injured and admitted to the General Hospital have died. Ten cases more are expected to have a similar issue, and on this account the inquests are adjourned from time to time. Captain Majendie, of the Royal Arsenal, Woolwich, attends the inquest as Government Inspector, and on Tuesday at the inquest submitted some of the witnesses to a most searching examination. Two brick hut wards have been run up in the General Hospital grounds to relieve the press of work.

ADULTERATED DRINK.

THE Chief Constable of Leeds, in reporting a large increase in the number of persons convicted of drunkenness, notwithstanding an improved state of the beer-houses, attributes the increase to the deleterious quality of the liquor drunk, which creates in some a stupor so complete as to render them incapable of the least action. He states that

he has "seen men fall as suddenly as though poisoned." The worst feature in such cases is, that the poor at length acquire a liking for such depressing poisons, and use them because their stupefying effect is more intense and more continuous. It is said that, in Liverpool, public-houses selling wholesome liquor cannot compete, in the lowest districts, with those which do not. Surely it is a matter of public interest that publicans should be prevented from thus poisoning the people wholesale, and from converting them from industrious citizens into dependent paupers.

PAUPER MIDWIVES.

THE Poor-law Board have informed the Guardians of the Holborn Union that they propose, at an early period, to take into their consideration the propriety of framing in detail regulations of general application for the conduct of Poor-law midwives. One would have thought that they might have advanced a step further by this time, and that the propriety of taking such a course might have been admitted long ago, seeing the persistent manner in which we have exposed the abuses consequent on the want of such regulations. Is it not monstrous, for example, that some Poor-law midwives should be permitted to take charge of 500 and even 600 cases of midwifery in a year? If there were a single practical accoucheur at the Poor-law Board, he would explain to the president the physical impossibility of one unaided woman attending so many cases without seriously neglecting some of them. It would be hard enough to do so in a hospital, but when the cases are scattered over large areas, the thing is altogether absurd. Moreover, cases do not come with any degree of regularity, and when two or three are on hand at the same time, which is inevitable when there is so large a number, neglect must arise.

LADY MEDICAL STUDENTS IN EDINBURGH.

THE large majority in favour of Dr. Andrew Wood's motion, declaring for the College of Surgeons of Edinburgh "that it is neither proper nor expedient that males and females should be associated together in the study of medicine either in hospitals or classes," must be felt by the ladies who wish to study medicine as another great blow to their hopes. The amount of feeling against mixed classes is very great, and is increasing. After all, the eight or ten ladies will have to yield in this matter to public opinion, and especially to the public opinion of the students. If 500 or 600 male students object to this association, there is practically an end of the question. They cannot be compelled by their teachers, even if they were unanimous, and they are by no means unanimous. Principal Sir Alex. Grant, who was in favour of the admission of ladies, at the dinner of the College of Physicians a few days ago announced that he was now satisfied that, the attempt having been made, it had proved a failure, and should not be persevered in.

IMPORTANT TO INSPECTORS OF VACCINATION.

WE draw attention to the following important decision of the sitting magistrate at Clerkenwell. Thomas Grim, of Kentish Town, was summoned for having neglected to have his child vaccinated within three months after its birth. He had already been fined £1 for similar neglect; and the sanitary inspector said that as these cases of refusal were becoming so frequent, he should ask that the defendant be made an example of. The child was now eleven months old. Mr. Cooke, the magistrate, stated that the law undoubtedly required him to enforce a penalty on any person who neglected to carry out the requirements of the statute; but, according to the 44th section of the Metropolitan Police Act, the authorities were bound to summon the father of a child within six months after the child had attained the age of three months. This summons had not been taken out within the required time, and therefore the case would be dismissed.

"VANITY FAIR."

LEAVING political and legal characters, with which it has hitherto dealt, our contemporary *Vanity Fair* has in its last issue taken a representative man of the medical profession to adorn its portrait gallery, in the person of Sir William Fergusson. A likeness the drawing certainly is; a portrait it certainly is not, for though the artist has caught the attitude by study in the operating theatre of King's College Hospital, the face has hardly that benevolent expression which we are wont to connect with it. The memoir appended to the portrait is meagre in the extreme, and incorrect in many particulars—as, for example, in making Sir William's baronetcy date from 1855, and in making no mention of his being Serjeant-Surgeon, and President of the College of Surgeons.

POISONING BY MISTAKE.

AN interesting collection of cases of poisoning by mistake will be found in *Tinsley's Magazine* of this month. They are notes by a gentleman who has had long experience in the metropolitan courts, and they illustrate very fully evils which the law has since attempted to deal with. We agree with the author that the real safeguard against accidents of this class is an intelligent appreciation of the responsibilities of dispensers and nurses. The writer points out that of the 27,688 persons returned as nurses at the last census, more than one-third were over sixty years of age—in fact, of an age when they required to be nursed themselves. Need it be wondered at, that not only is the wrong medicine frequently given, but poisoning by mistake is by no means so rare an occurrence as is commonly supposed.

NEW FEVER HOSPITAL AT EDINBURGH.

ENERGETIC measures are being taken to fit up the new Fever Hospital in as effective a manner as possible. The Local Authority is bound by law to provide accommodation for patients in the event of an epidemic; while the infirmary will deal with casual cases as heretofore. The hospital in the Canongate, which has been secured by the magistrates and Council, may therefore be regarded as temporary in its operation. Fever in Edinburgh is not on the increase.

THE ROYAL COMMISSION ON THE CONTAGIOUS DISEASES ACTS.

WE have been informed that some strong evidence has been brought forward before the Royal Commission on the Contagious Diseases Acts showing the excellent effect of the working of these Acts, in certain districts, in diminishing the number, by reform and otherwise, of young girls leading dissolute lives.

YELLOW FEVER IN SPAIN.

BARCELONA and Alicante, on the 27th ult., were announced as entirely free from cases of yellow fever. This is the first time for many months that the statement could be truthfully made. Whether or not the fever has finally disappeared from the Peninsula, or merely passed into hibernation, to break out afresh in spring, the Spanish Government should lose no time in putting the country

under effective sanitary administration. Spain has just received a new monarch, who could make no happier or more auspicious commencement of his reign than the introduction and enforcement of those laws of health which his subjects have hitherto set at defiance.

SMALL-POX IN A RESTAURANT.

SOME conception may be formed of the difficulties now felt in consequence of the want of hospital accommodation for cases of small-pox from the following case. A servant maid has been attacked at a considerable restaurant in the Holborn district. The underground kitchen of the establishment is the room in which she sleeps, and has been treated for four days. During the whole of this time the "chef" of the restaurant has continued his cooking operations with such interruptions as the presence of a sick female imperatively required. We do not envy the patrons of this establishment, who, if the truth were known to them, would be horrified at finding that they have been both eating and breathing small-pox poison.

UNSKILLED MIDWIFERY.

THE *South London Press*, in commenting on the death of a poor woman in her confinement, from exhaustion—the consequence, our contemporary avers, of want of skill in the midwife,—says there should be some remedy for this evil in the new Medical Bill. Our contemporary is right, and he will see that we have not been unmindful of the point in the framing of our Bill. At the inquest, the coroner said that poor people could not be compelled to have a doctor for their midwifery. But it is to be regretted that he did not point out that every woman too poor to pay a medical man can have the Poor-law doctor to attend her.

A WAR VICTIM.

WE regret to hear of the death, at Versailles, of Dr. Brewster, an American dentist, who long practised in Paris, and attended many of the crowned heads of Europe. A few years ago he retired in favour of Dr. Evans, and took up his residence at Versailles, where, notwithstanding the American flag floating over his house, a number of Prussian officers were quartered upon him. Dr. Brewster died on Thursday, the 15th, in a fit, doubtless brought on by the excitement and trouble in which he has been living for the last few months. Mrs. Brewster (who is a sister of Dr. Henry Bennet) and her daughter are safe in this country, but a son had remained at Versailles with his father.

LE BON DOCTEUR NOIR.

IT is a melancholy fact, which should, however, be recorded, that the lamented Dr. Davis, who did such good service in Eastern France, and died at his post from small-pox, had never been vaccinated. He entertained a strong prejudice against the system, which he had expressed on more than one occasion. On his death-bed, when it was, unfortunately, too late, he did not conceal his regret that he had not submitted to the operation.

THE PRUSSIANS AND THE GENEVA CONVENTION.

WE do not know whether it be that Englishmen are very deficient in tact, or whether the great military success and prosperity of the Prussians have rendered them arrogant and dictatorial in their manner of doing things; but it nevertheless seems to be the case that the English are not very popular, nor are the services they have rendered in the cause of humanity valued very highly. *The Times* correspondent remarks that the Prussians seem to forget that they have signed the Geneva Convention. The English ambulances are not in favour, owing, it is said, to the stupidity of those who engaged French drivers. An English gentleman was told that "the English ambulance is a nest of spies."

POOR-LAW MEDICAL OFFICERS' ASSOCIATION, IRELAND.

THIS Association, we understand, is daily gaining ground, and will, no doubt, in time, prove a most valuable organisation. It has already taken root in most of the unions and counties in Ireland. The antagonism that we alluded to some weeks ago as having been supposed to exist between this Association and the Irish Medical Society, and that we strongly deprecated at the time, has, we trust, been entirely overcome, and we have no doubt that the consequent amalgamation of these societies will lead to most important results.

RESIDENCE AND THE VACCINATION ACT.

A QUESTION raised in a case under the Vaccination Act, before the Cambridge borough magistrates, is of importance. If a child is removed from the union in which its parents live, can penalties be recovered from them for non-compliance with the Act? If not, parents may evade the Act by sending their children into another union. We fear that the Act is framed so as to require the child to live in the union for which the informant acts. The residence of parents, the only thing known to registrars, is of no account as regards Section 31 of the Act. The point is to be decided by the Court of Queen's Bench.

IN the eight principal towns of Scotland the deaths of 2254 persons were recorded during the month of November. The mortality was considerably below the average. Fever caused 129 deaths, of which 81 occurred in Glasgow. Relapsing fever is spreading extensively in Glasgow, and is also manifesting itself in Paisley and Greenock. Scarlatina was most fatal in Aberdeen, where it caused 10 per cent. of the total mortality. Measles caused 17 per cent. of the deaths in Paisley.

DR. PHILIPSON'S sickness returns show that the total admissions into the Newcastle Fever Hospital during the months of September and October amounted to 90; of which 23 were cases of continued fever, 7 of enteric fever, and 60 of typhus. In the corresponding period of 1869, 18 cases of typhus were admitted, 30 in 1868, and 79 in 1867. Many of the last October admissions were of a mild type.

THE general mortality in London was considerably higher last week than it has been in any week since July, when diarrhœa was very prevalent. The sharp touch of winter which we had a fortnight since has evidently shown its effects in the increased mortality of the young and of the aged recorded last week.

THE case of Catch *v.* Shaen has, after a trial extending over many days, resulted in a verdict for the plaintiff with £600 damages. The Lord Chief Justice expressed his dissatisfaction with the verdict, and stayed execution. Mr. Shaen has applied for a new trial.

THE sum total of the collections on "Hospital Sunday" at Birmingham this year amounts to £4025, being the largest sum ever yet collected for the minor charities which by rotation take this year's proceeds.

THE number of deaths registered from small-pox last week in London was 44, against 61 and 60 in the two previous weeks. Half the fatal cases (22) were returned from the East Districts, in addition to 3 cases belonging to those districts which occurred in the Hampstead Small-pox Hospital. The disease appears to be gaining ground in Westminster.

THE Cambridge Improvement Commissioners have decided for the present not to proceed with their projected Bill for the improvement of the river Cam. Intended Government legislation on the general question, as applied to the whole kingdom, is alleged as a reason for the step now taken by the Commissioners.

INTIMATION has been made by the Privy Council to the Liskeard board of guardians that legal proceedings will be taken against them if they longer delay to enforce the Vaccination Act as by law required.

THE will of the late Mr. Charles Egan, of High-street, Dublin, was proved in the Probate Court last week. Mr. Egan has left about £190,000 to be distributed to various charitable institutions in that city.

IN terms of the Royal Infirmary (Edinburgh) Act, 1870, at a special general meeting of the Merchant Company, Thomas J. Boyd, Esq., master of the Company, was elected manager of the Royal Infirmary.

AN outbreak of scarlatina on board the *Britannia* training ship is reported in the *Globe*; and it is further stated that all the cadets, except those "passing out," were to be sent to their homes.

THE Prince of Wales has announced that he will have much satisfaction in presiding at the anniversary festival of the Earlswood Idiot Asylum next year.

WE are glad to be informed that Sir Roderick Murchison's condition has, on the whole, somewhat improved of late. He has quieter nights, and his mind remains clear.

THE medical library of the late Dr. Beddoes, of Shrewsbury, consisting of 150 volumes of modern works, has been presented by his widow to the Liverpool School of Medicine.

THE MEDICAL CLUB.

AT the monthly dinner and *réunion* of the members of the Medical Club, held on Tuesday last, Dr. Lory Marsh presiding, Dr. J. A. LUSH, M.P. for Salisbury, in responding to the toast of "The House of Commons," referred to the subject of medical reform, and remarked that he, in common with the other medical members of the House, protested against the Government Bill of last session, which was admirable in its details, but wholly unsatisfactory in consequence of its denying to the body of the profession the right of representation in the Medical Council. With regard to the Bill prepared by THE LANCET, Dr. Lush was of opinion that it would be very materially strengthened and improved if, in addition to the twelve members of the Council proposed by the Bill, the right should be reserved to the Crown of nominating as chairman some member either of the House of Lords or of the House of Commons, who should be the recognised medium for bringing all sanitary and hygienic matters before the Legislature, and for communicating information upon all medical questions to the profession. In its general provisions Dr. Lush expressed his approval of the Bill drawn by THE LANCET.

Dr. LORY MARSH spoke briefly upon the condition and prospects of the Club. These, he said, were encouraging, for, although it had been found necessary, which he much regretted, to increase the terms of subscription, yet he was glad to find that that increase had not led to so many withdrawals as had been anticipated; and as new members were at the same time coming in, he believed that when they went next year over to the new house in Pall Mall, they would be in a more flourishing state than ever. In that new house they would have an establishment which, externally and internally, would, relatively to their numbers and requirements, be fully equal to any club in the metropolis. He hoped the profession and the Club would continue to be a benefit and support to each other.

Correspondence.

"Audi alteram partem."

THE ORIGIN AND SPREAD OF TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—In *The Times* of this day (Dec. 19th, p. 4) there will be found, in a second notice of the Privy Council Health Report for this year, the following sentence:—"There is every reason to believe that a law which should divorce sewage from drinking-water would, at no distant date, extinguish typhoid fever entirely." "There is every reason" that the erroneousness of this statement should be put in a clear light, for it is by such sweeping statements that discredit is brought upon the teaching and preaching of the apostles of hygiene.

Firstly, then, there is no justification for this statement in the Report which the reviewer had before him, Mr. Simon expressly saying at p. 16—"The differences are in fact little more than whether the filthy infection has been embodied *in air* or in drinking-water." These differences, however, explain the fact, which the roughest observer can convince himself of, that in a typhoid-stricken locality total abstinence from its water will not always confer immunity from the disease.

Secondly, in a work of no less authority and accessibility than Dr. Murchison's "Treatise on the Continued Fevers of Great Britain," we find it stated, at p. 447, that "in most cases the poison is taken into the system through the air"; and in the fourth volume of the "Munich Zeitschrift für Biologie," p. 512 (Oct. 1868), we have a most conclusive, though short, paper by Pettenkofer in refutation of a less sweeping statement of Professor Hallier's to something like the same effect as the statement of *The Times* reviewer.

I apprehend, however, that in such a case as that of a parish in this city, in which, as I was informed this day, fifteen cases of typhoid were all simultaneously brought under the notice and care of a sisterhood localised there, it would be wise to take off the pump-handles, as they were then taken off in the affected locality. And I apprehend further that if the outbreak ceased therewith, a view which connected its origin with drinking-water would assume a high degree of probability. And thirdly, I feel assured, though I cannot refer to chapter and verse in any authority for my saying so at this moment, that it is a recognised sanitary rule to look to the supply of drinking-water when outbursts of fever have been *sudden* and *simultaneously extensive*. The poison is, no doubt, sometimes introduced by way of the œsophagus, but it is oftener introduced by way of the trachea.

I do not know that it is necessary for me to apologise for meddling with sanitarian matters; for if "it belongs," as Mr. Forster in his great speech of March 14th last said it did, "to all religious men to teach religion," it certainly belongs to all men who are interested in health to teach what they may happen to know about it. As it happens, however, I am specially bound to write on this particular subject, and propose, with your kind permission, to do so at greater length at an early opportunity, in vindication of

certain views put forward by me in your columns in March, 1869, to much the same effect as those I now advocate.

I am, Sir, your obedient servant.

Oxford, Dec. 19th, 1870. GEORGE ROLLESTON.

RESECTION OF JOINTS IN MILITARY PRACTICE.

To the Editor of THE LANCET.

SIR,—Your report of the proceedings of the last meeting of the Pathological Society would convey to your readers a rather sweeping condemnation on my part of all attempts at conservative surgery, more especially resections, in military practice.

It is, I think, certainly true that, in severe gunshot fractures of the lower limb, amputation is often the better course, and that, when not performed in the first instance, it often becomes imperative at some later period in order to afford a chance of life, and then the conditions for success are not at all so favourable. It is also true that resections of the hip, and especially of the knee, have not been satisfactory.

In the upper extremity, however, the converse holds true, and resections of the shoulder, the elbow, and the wrist, as a rule, do well; while, compared to the leg and thigh, amputation of the forearm and arm is but rarely needed.

It cannot be too strongly insisted upon, that where an operation is required from the severity of the injury, an immensely better chance of success is afforded by performing the operation at once, and it therefore becomes of great importance to make an early and thorough examination of all gunshot wounds by the finger. No probe, however cunningly devised, will answer so well.

In your special correspondent's valuable communication on "The Surgery of the War," I may make a correction, of which he doubtless will be glad to hear. In the interesting and, I believe, unique case where I excised the shoulder and elbow joints in the same arm, the patient did not die. In fact, I only yesterday had the pleasure of receiving a letter dictated by him under date of December 4th, in which he expresses his great gratitude for what has been done for him, and his expectation of a speedy recovery. Your correspondent is in error in attributing to Stromeyer the performance of thirty-six resections of the knee-joint. It is an operation which, as applied to military surgery, that distinguished authority emphatically condemns. I have only to add that I agree most perfectly with the pertinent remarks of Mr. Hulke, "that every campaign must be treated upon its own merits, and that it would not be right to repudiate conservative surgery in military practice altogether."

I am, Sir, your obedient servant,

WILLIAM MACCORMAC.

Grosvenor-street, W., Dec. 17th, 1870.

THE TEACHING OF PRACTICAL PHYSIOLOGY.

To the Editor of THE LANCET.

SIR,—May I beg the favour of a small space in your columns to correct an impression which may possibly have been made on the minds of your readers by an allusion, in the last week's number of your journal, to some remarks of mine on the teaching of Practical Physiology in the schools.

I certainly made an objection to such teaching, in accordance with what I believe to be a widespread feeling amongst the teachers in the metropolis; but not solely or chiefly, as alleged, on the ground that it would be likely to revive and encourage the practice of vivisection. I admit this to be a very cogent objection, but I dissent still more strongly for another reason, which had not, in your remarks, a corresponding prominence given to it. I object because I cannot help thinking that the time given by students to Practical Physiology might be more advantageously employed in the acquirement of the more rudimental and important parts of a professional education. If by a reference to the several Courts of Examiners it could be satisfactorily shown that, as a rule, the students, on presenting themselves at the "pass" examinations, are thoroughly well up in, more especially, anatomy, regional and histological; in physiology, as learnt by inference and by the usual instructions of their teachers; and in practical medicine and surgery—well up, in short, in those branches which would yield an adequate stock of knowledge for all the resources of a competent practitioner of his profession, and be a basis for higher attainments, *then*, by all means, under certain restrictions, let physiology be taught *practically* as well.

But I have reasons for thinking that such an appeal would not be satisfactorily responded to; but that, on the other hand, it is too frequently felt at these boards that the knowledge, *even in these branches*, is lamentably defective. If such really be the case, is it likely that the student who is puzzled to describe the ethmoid or sphenoid bone, or the fifth pair of nerves, or to answer very much more simple questions in anatomy, and the simplest in surgery, would be capable of appreciating or understanding experiments on the vagus, or on the grey matter of the cord, or would be in the least degree enlightened on the subject of systole or diastole by the exhibition of an unencased living heart? I cannot think that he would.

Our educational course is not designed to make men *great*, so much as *competent* members of their profession. The former will always make themselves.

The faults indicated in these remarks do not, in my opinion, rest so much with the students as with the course of instruction to which they are compelled to submit themselves. According to the existing curriculum, their time and brains are overweighted. They are required *to learn, within a given period*, more than they can possibly *understand*. And I humbly submit that, if any alteration should be made in the course of study, it should be in the direction of *less learning* but *better learnt*.

I am, Sir, your obedient servant,

Finsbury-place South, December 21st, 1870. JOHN GAY.

SANITARY SCIENCE AFLOAT.

To the Editor of THE LANCET.

SIR,—In your annotation on this subject in your issue of the 10th December you say you will be glad to know the experience of the medical officers of the Flying Squadron, during their late voyage round the world, as to the use of preserved meats. I hope many of them will comply with your request, as this is really a professional subject, and cannot surely come within the scope of the Admiralty order as to officers of the fleet writing in public journals. If they are silent you must put it down to this order rather than to want of zeal.

When I was surgeon of H.M.S. *Nimrod* several years ago, preserved meat and vegetables were used both by officers and men on the voyage to China, and with the best effects, as the crew arrived on the station in excellent health and spirits. The various sanitary suggestions which I made were most kindly and promptly carried out by my late lamented friend, Captain Roderick Dew, R.N., and with such good results that I am thankful to say not a single death occurred for a whole year, as will be found by my journal, lodged in the office of the Medical Director-General of the Navy. I have, in former letters in your columns, repeatedly urged the great importance of the issue of preserved meat and vegetables both in the Royal Navy and the mercantile marine. The excellence and comparative cheapness of the supply from Australia will doubtless give a stimulus to the increased consumption of preserved meat both ashore and afloat. A good supply of fresh water on board ship is most important, and this can now be obtained in all steam vessels by a well-known process. As the Admiralty complimented Admiral Hornby on the economy of fuel on board his ships, you may be sure neither officers nor men were overwhelmed with the liberality of their water-supply.

I am strongly of opinion that in this squadron there should have been a deputy inspector-general, specially qualified to record and utilise his experience in naval hygiene, &c.; but the bugbear of economy—or rather unwise and injudicious parsimony—prevails in the councils of the Admiralty (while lavish in their expenditure on ex-

perimental vessels, alas! utterly unseaworthy), thus adding to the unpopularity of the service, and retarding, I fear, the progress of sanitary science afloat.

I am, Sir, yours faithfully,

Chesterfield, December 12th, 1870. JOHN ROSE, M.D.

P.S.—While speaking of the navy, I should like to ask three questions—1. Why has not the excellent and talented Director-General, Dr. Armstrong, received the Order of the Bath, which he well earned many years ago in the Arctic regions, to say nothing of his other distinguished services both at home and abroad? 2. Why was Sir David Dens, K.C.B., M.D., passed over when the last honorary physician to Her Majesty the Queen was nominated? I ask this question without any disparagement to the very able and meritorious officer who received this distinction (Dr. Salmon, Inspector-General). 3. Why did not the Admiralty grant a good-service pension to Dr. Leonard, Inspector-General, on his retirement, he being confessedly one of the best, most respected, and most energetic officers in the service, as well as a Blane Medalist?

I shall conclude by asking a fourth question—When such slights and injustice are inflicted on the higher ranks of the medical department, how can the Admiralty expect young gentlemen of talent and promise to join the service?

THE CLINICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—Your report of some remarks made by me at the last meeting of this Society contains an error of some importance, which I dare say you will kindly allow me to correct. In describing a remarkable case of tolerance of morphia, subcutaneously injected, I said that I had injected *nearly five grains* at a sitting (not fifteen grains), with the effect of producing only slight contraction of the pupils.

May I correct, also, a slight error as regards the kind of syringe which I advocated? I did not recommend "Glover's steel needle," but described a modification of the syringe-tube which was devised by me some time ago, and which consisted in the addition of a solid steel glover's needle-point to the ordinary gilt tube. This was described in THE LANCET of March 20th, 1869. A constant use of this instrument since that time has confirmed my opinion of its advantages. Amongst these I may mention the impossibility of injecting the fluid into a vein in case one should be accidentally wounded.

I am, Sir, your obedient servant,

Grosvenor-street, Dec. 21st, 1870. THOMAS BUZZARD.

THE LANCET MEDICAL ACT AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—In my opinion, the Bill proposed by THE LANCET is of so comprehensive a character as to require little, if any, alteration. Such, however, does not appear to be the view entertained by the coroner for Somerset. He would, I fear, have the Bill go before Parliament in such a form as to ensure its rejection. Conciliations *must* be made, and things of trifling moment allowed. I firmly believe that Clause 29 embraces all that is necessary, or wished for by the greater part of the profession. It draws a clear line of demarcation between the duly qualified and the unregistered, which the Act of 1858 lamentably failed to do. I much question whether the suggested alteration of the clause would be sufficient to put down quackery, or whether anything would be gained by pressing unduly upon unqualified assistants. They are all very well in their place, and, so long as they are kept from using titles, can do but little harm to the registered practitioner.

I am, Sir, your obedient servant,

December 20th, 1870. MEDICUS.

To the Editor of THE LANCET.

SIR,—My views on the 29th section of your suggested Medical Acts Amendment Bill so fully coincide with those of "Vigilans" that I cannot forbear saying so. The many difficulties are, in my opinion, so well met by his suggestions that, if they can be carried into effect, a great boon must accrue to the medical profession at large; for it appears to me of trifling importance, if a man infringes the law by acting as a physician or surgeon, whether or not he does so under some fictitious name or title.

I quite agree with him in the importance of a Public Prosecutor being appointed, if the law is to be properly and effectively carried out; for, if left to the parties more immediately concerned, as it has hitherto been, things will remain in the state that they now are. I cannot understand why there ought to be any more difficulty in fining persons for infringing the Medical Act than there is in fining those who sell spirits without a licence.

The way in which I think chemists endeavour to gull and impose on the public, by placing over their shop fronts the words "Medical Hall or Dispensary," and those impostors styling themselves "herbalists," and having the word "Surgery" painted on their doors leading from their shops to a back room, ought, in my opinion, to be considered breaches of the law; for, whether persons call themselves herbalists or by any other name, it matters not, so long as they are thus acting for gain.

Besides all this, the chemists have obtained an Act of Parliament to protect themselves against any person starting in their line without having previously passed an examination.

I am, Sir, your obedient servant,

FAIRPLAY.

HAMPSTEAD TEMPORARY SMALL-POX HOSPITAL.

To the Editor of THE LANCET.

SIR,—This hospital was opened for the reception of small-pox cases on the 1st of December, and within a fortnight every bed was filled, so that it has been necessary to refuse admission to many for the want of room. I subjoin a few statistics of our cases to this date. It is too soon yet to make general deductions from them, but already they prove the beneficial results of vaccination, and the often fatal consequences following on the non-enforcement of the Act. If the members of the Anti-Vaccination League would only pay me a visit here (that is, if they dare do so without being revaccinated), I think they could be shown what would convert them if they had the power of reasoning left.

To judge from the entries here, small-pox is prevalent to an alarming and increasing extent in three districts in particular in the metropolis: firstly the Eastern, comprising Shoreditch, Bethnal-green, &c.; secondly, St. George's Union (Westminster district); and thirdly, on the south side of the Thames, in the Unions of St. Saviour's, St. Mary (Lambeth), &c.

Since the opening of the hospital 153 patients have been admitted, of whom 109 were vaccinated and 44 not. The total number of deaths has been 20; of these 2 were occasioned by fever, and the patients were not twenty-four hours in the hospital; of the remaining 18 only two were vaccinated, and 16 unvaccinated. Less than 2 per cent. fatal in vaccinated cases, and 36 in unvaccinated.

The following is a summary of the cases admitted:—

	Total.	Fatal Cases.
Males over 15 years of age	61	4
Females ,, ...	30	2
Males between 5 and 15 years... ...	26	4
Females ,, ...	21	3
Children under 5 years	15	5
Total	153	18

I remain, Sir, your obedient servant,

ROBERT GRIEVE, M.D.,
Medical Superintendent.

Dec. 20th, 1870.

DEATH OF GEORGE FISHER.—Old students of King's College and the Royal Academy will learn with regret the death of Fisher, many years the attendant in the Anatomical rooms. For the last ten days he had been missing from the scene of his duties, which he had long and efficiently performed; severe illness arising from a poisoned thumb, followed by an attack of bronchitis, being the cause of death.

THE SURGERY OF THE WAR.

(FROM OUR SPECIAL CORRESPONDENT.)

(*Continued from p. 872.*)

WHILE at Sedan I had also the opportunity of visiting the hospitals under the care of Dr. Frank at Balon and Bazeilles, the most interesting of which was that at the Château Montvillier, at Bazeilles, the property of the Marquis de Ferriers, a splendid old mansion, standing in a large park, and surrounded by fine avenues, gardens, orchards, &c. The woods in the park had been the scene of a most desperate and bloody fight, having been taken and retaken more than once. The staff here under Dr. Frank consisted of Drs. Hewitt and Watson, surgeons, and assisted by some Bavarian dressers, and Mr. James, who superintended the stores and general arrangements of the house; and the nursing was, at the time I was there, conducted by the sisters from the All Saints Home, Margaret-street, who were invaluable. The patients, who were almost all Bavarians, were chiefly accommodated in the château, and it was a curious sight to see the gorgeously decorated apartments, with their marble mantle-pieces and elegant chandeliers and mirrors, converted into hospital wards, in some rooms the beds used being on the mahogany bedsteads belonging to the house. The ventilation of these rooms was, of course, not perfection, but all that could be done by keeping open windows and doors, was most carefully attended to by Dr. Frank. At the back of the château we had an example of the opposite extreme in the way of lodging the wounded and sick, for at the time I was there, there were about a dozen, chiefly convalescent sick, lodged in a loft over the stables, and lying on mattresses on the floor. The weather being warm, however, I do not know if these were not as well off as the others, as there was very good ventilation, and plenty of light. Food was supplied in sufficient quantity by the Prussians, and wine was partly served out from the well-filled cellars of the château, by the butler, who remained, and acted as head cook and waiter to the medical staff. The patients being almost all Germans, the wounds were, of course, chiefly produced by the chassepôt bullet; but I cannot say I found much difference in the few cases I saw from those made by the needle-gun balls, and from what I heard there does not really seem to be much difference. The mode of treatment adopted was practically the same as at the Caserne d'Asfeld, carbolic acid and carded oakum being the chief disinfectants used; and I regret to state that, in spite of the apparently healthy situation, and in spite of the greatest care by the medical officers, the results were no better. Pyæmia was a very frequent cause of death, especially after the third week, as it seemed to be everywhere; hospital gangrene being, I believe, unknown, and erysipelas very rare. The most interesting case I saw here was that of a young Bavarian, who had received a bullet wound just above the pubes, wounding the bladder, the ball remaining somewhere in the body. The bladder being full at the time he was wounded, the peritoneum escaped injury. Urine flowed freely from the wound, and for the first three weeks he emptied his bladder solely by that means. The wound granulated healthily, and slowly contracted, and the last I heard of him was that he was making a good recovery and passing water by the urethra. He never had any symptoms of peritonitis during the whole time. Besides the wounded, there were a considerable number of sick, chiefly suffering from dysentery, and some from what was usually called typhus by the German surgeons, but which seemed more nearly to correspond to typhoid, combined with the effects of exhaustion, and want of proper food, the chief symptoms being diarrhœa and exhaustion, with high temperature, but seldom with true typhoid spots. True typhus did occur, I believe, but very rarely. The mortality among these patients was considerable, and I regret to state that one of the surgeons, Dr. Hewitt, contracted the disease in the discharge of his duties; but when I last heard he was fortunately making good progress, and was considered out of danger. At Balon Dr. Frank had also two hospitals, conducted on the same principles, with the assistance of Drs. Chayter and Thomas, with Messrs. Crookshank and Scott as dressers, the nursing and household arrangements being admirably conducted by Mrs. Chayter and some of the All Saints' sisters. Pyæmia raged here, as everywhere else—as much, I believe, in some of the patients who were treated in tents as in those in the houses. Before leaving this subject I must bear witness to the admirable self-sacrificing spirit Dr. Frank showed in his management of these hospitals, securing from everyone with whom he came in contact a lasting feeling of respect, gratitude, and affection.

I also visited some of the French hospitals in this district, but I cannot say they compared favourably with the English, unsatisfactory as they were. Antiseptics and ventilation were greatly neglected, and the smell in some of the wards was very bad. In one case I saw twelve wounded, three weeks after the battle, lying on the wool in the loft of a cloth factory, without any covering but one coarse blanket each and their overcoats. Pyæmia, dysentery, and diarrhœa abounded in all these places. In none of these hospitals did I get a sight of any mitrailleuse wounds.

In the whole of the Sedan district the system of using every convenient-sized house as a hospital, in preference to tents or wooden sheds, seemed to be universally adopted; and at first sight many of these temporary hospitals had a most charming appearance, often situated in beautifully airy situations, surrounded by parks or gardens, and frequently commanding lovely views, and yet they were all, as far as I saw, hot-beds of pyæmia. In some of the French hospitals this seemed partly due to overcrowding and want of cleanliness, but in others it occurred in spite of the most perfect arrangements.

After leaving Sedan, I paid a visit to Saarbruck, passing through Arlon and Treves. As soon as we passed the German frontier, we saw convalescent sick and wounded at every station, every village almost seeming to have its complement quartered on it. At Saarbruck, of course, was a large number of sick and wounded from the army round Metz, either resting on their way to more distant parts of Germany, or undergoing systematic treatment in some of the hospitals in the town. There was also a small residue of those wounded at Spicheren, who had managed to survive to the end of September, and were yet not well enough to be moved. The hospitals were not very numerous at this time in the town, the best I saw being a large one constructed on the wooden-hut principle, capable of containing about 250 patients. I had not time, unfortunately, to go over it. The one I saw most of was that under the care of the English society, having been lately taken from the Dutch and Belgians, who, having held it two months, and having but few cases of particular interest left, were glad to find someone else to take it. It was an Uhlan barrack, capable of containing about 120 beds, situated at the foot of the heights from which the French shelled St. Johann railway station. Its front looked into a square with some trees in it, and its back was closed in by the stables. It was built utterly regardless of ventilation. The ceiling of the wards was very low—not more than ten feet—and the cubic space for each patient, supposing all the beds in the wards to be filled, was about 800 to 900 cubic feet. The wards communicated with each other by long narrow and dark passages, from which they were shut off by a door kept constantly closed. The windows were only on one side of each ward, and there was no fireplace, nor, in fact, exit for air of any kind, so that any free current was next to impossible. The nursing was conducted by Dutch and German sisters, who, in spite of their cleanliness, showed their national affection for foul air, keeping the windows only partially open. In other respects the hospital was good enough. It had an excellent kitchen and latrines, and was kept beautifully clean by the neat Dutch sisters. On the English taking possession, many of the wards which were then empty were whitewashed, and some plan was being devised for knocking holes into the passages, so as to try to get some through-and-through ventilation; but this had not been done when I saw the place last. The medical staff here consisted of Dr. Roger, Lecturer on Pathology at Aberdeen, and Dr. Junker, and some dressers; and at first, as there were only 35 patients, they had not too much to do; but afterwards, as fresh cases were sent in by the Prussians, and the dressers did not arrive from London, they got their hands

rather full. When I saw the hospital the cases were chiefly surgical, most of them having been wounded at Spicheren. An extraordinarily large proportion of them were cases of gunshot wounds of the femur, who had managed, by reason of their strength, to linger on nearly two months, and some of them seemed to have considerable strength still left; but I am afraid few will ultimately recover. The mode of treatment adopted by the Belgians and Dutch had usually been putting the limb up in plaster-of-Paris. In some cases this had succeeded very well, but in others the shortening and displacement of the limb were frightful. The plan of treatment which seemed to me best, especially in those cases in which one opening was posterior, was the following. The patient was laid on a number of stout bands passing between two poles, so that at any time he could be raised by four assistants completely from the bed, and the wound freely cleaned and dressed. After the dressing the position of the limb was maintained pretty perfectly by means of sand-bags on each side, and a weight extension apparatus. This method of treatment seemed by far the best; and I should have felt inclined to adopt it in all compound fractures of the thigh. A very interesting case I saw was one in which the patella had been completely smashed by a needle-gun bullet. It had passed across it in a direction slightly from above downwards, and it is impossible to believe but that the joint must have been opened. Yet the man was to all appearance in a fair way to recover, without any further treatment than that of fixing the leg in plaster-of-Paris bandages, and removing a few fragments of necrosed bone from the patella. It had been five weeks in the same plaster-of-Paris splint when I saw him, but he did not seem to suffer from any irritation or excoriation of the skin in consequence. The mode of application of these splints, wherever I have seen them used by the German surgeons, has been of the simplest kind, consisting merely of bandages soaked in the liquid plaster, applied directly to the limb without anything underneath, and strengthened if necessary by a piece of board or pasteboard at the weakest part, holes then being cut opposite each wound. It is applied very early by the German surgeons, in some cases almost immediately after the injury. They say it prevents swelling; but as they usually leave the foot out of the bandage, swelling frequently occurs in it. I heard of one case in which a simple flesh wound of the leg, from which the ball had been extracted, leaving only one hole, was put up at once in plaster-of-Paris, under the impression, I suppose, that it was a fracture. The result was, that when pus began to form, and the limb to swell, the patient's sufferings became intolerable, till the splint was removed, when an abscess was found pointing under the skin, in the opposite side of the wound. In the hurry to get patients into a state to be transported from the front, such mistakes are, I believe, not uncommon. In dressing the wounds, the Dutch and Belgian surgeons use infusion of camomile, like the French; but the exact action it is supposed to have on the wounds I could not find out. I also saw here a very interesting wound of the chest. A chassepôt bullet had passed through the fleshy part of the arm, and had entered the chest between the sixth and seventh ribs on the left side, between four and five inches posterior to the nipple line, and it had not been extracted. It is surprising how it can have escaped wounding the heart or stomach, unless it was so spent as to stick in the lung; but then, I should think, it would have been found. The man, however, had made a good recovery, and was soon going to leave the hospital. I saw another curious wound of the buttock. The patient had been lying down firing over his knapsack—a common plan adopted by the Prussians, to afford themselves a little cover—when he was struck by a bullet, which just grazed the crest of the ilium and passed out in the fold of the nates about three inches from the anus. This man nearly lost his life by secondary hæmorrhage, about a month after the accident, but when I saw him was in a fair way to recover. I only saw one doubtful case of pyæmia in the hospital, in spite of its bad ventilation, but, from what I could gather from the sisters, there had been a good deal at one time, while the Dutch and Belgians were in charge. In the wards at the top of the building were some cases of dysentery and one of a peculiar eruption confined to the legs and back. It consisted of elevated purple spots, about ¼ in. to ½ in. in diameter, on the summit of which, in many places, a bleb formed. It was said to be infectious by the Dutch surgeons, two patients having suffered in the same ward; and at first they considered it a sort of modified small-pox, but as the eruption had lasted two weeks, and the patient had not a single general symptom of small-pox, this theory seems hardly likely to be correct. The patient had no symptoms of scurvy, and denied having had syphilis.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

In my last letter I was of opinion it would have been well if the College of Surgeons had expressed their views on the general question of admitting male and female students to prosecute their studies in the same class. I afterwards learned that notice of a motion to the effect "That, in the opinion of this College, it is neither proper nor expedient that males and females should be associated together in the study of medicine either in hospitals or in classes," had been given by Dr. Andrew Wood. A meeting of the College was held on Monday, when the motion was brought forward by Dr. Wood, and seconded by the veteran Dr. J. Gairdner, the treasurer. To this an amendment was proposed by Dr. Handyside, Lecturer on Anatomy, seconded by Dr. Watson, Lecturer on Surgery, "That, in the opinion of this College, it is not expedient that the College come to any resolution in regard to mixed classes." It appears that the motion of Dr. Wood was carried by a majority of 27 to 4. This is as it should be, and I congratulate the College on having expressed so decided an opinion on the subject.

The future fate of the present Infirmary buildings may now be considered decided, for the Senatus of the University has agreed to accept the offer of the Infirmary managers to sell the Royal Infirmary buildings to them at the price of £20,704. This is stated to be the sum fixed by the mutual arbiter.

The national memorial of the late Sir James Simpson is not to be allowed to pass without some censure. It appears that a list of names to form a "General Committee," had been prepared from suggestions by members of the Provisional Committee. The names have been published of some gentlemen who object to their names being so used, as when the sheets were issued it was then too late to withdraw them. In reply, the hon. secretary, Mr. Colston, states that it is satisfactory to find that the selection of names has been a good one, for although the publication of the list has been delayed in order to give full time for refusals, out of 896 names suggested only 15 have declined to act. The memorial is now being pushed with increased energy, but the subscription-list does not rise very rapidly as yet.

Edinburgh, Dec. 21st, 1870.

Obituary.

JAMES KELLY, M.R.C.S. ENG., L.R.C.P. EDIN.

MR. KELLY had an extensive practice in Jarrow, near South Shields. The account of his character and his death from typhus, sent us by an esteemed correspondent, though somewhat fragmentary, is so interesting that we give it pretty much as we receive it. Mr. Kelly was a self-made man. About the age of twenty-six he was a farm servant. He was then sent by his priest (a Roman Catholic), near Wooler, in Northumberland, where he was born, to a school. Then, for a time, he became a schoolmaster at Berwick or Edinburgh. After this, having, we presume, picked up some knowledge of medicine, he became dispensing assistant to Mr. Counsellor at the Felling. He then studied medicine at the Newcastle-upon-Tyne School of Medicine, and became a Member of the English College of Surgeons and a Licentiate of the Edinburgh College of Physicians. He settled in Jarrow in 1864. He was quite well up to the 18th of November, spending the afternoon with Mr. Crease, of South Shields, to whom we are indebted for our information, and who, in common with Dr. Charlton and Dr. Bolton,

of Newcastle, and with Mr. Wilson, of Jarrow, attended him. On the morning of the 19th he was called up to see a child. He felt cold, and went to bed again, but rose at the usual time, and visited till 2 o'clock on that day, when he took to his bed, from which he never rose again. The case was one of bad typhus, with copious mulberry rash. Like many others, he had a presentiment of his death. On Saturday, the 26th November, in a semi-conscious moment, he said to Mr. Wilson at his bedside, "Wilson, I'm dying; I shall die on the eleventh day, Tuesday." And he did die on that day.

Mr. Kelly was greatly and deservedly beloved. He was unmarried, and a man of great literary taste, a lover of pictures and curiosities, and kept all kinds of animals as pets in his house. During the strike at Jarrow, he daily fed many starving poor, by whom he will never be forgotten. He was buried on Saturday, December 3rd, a busy marketing day at Jarrow, and yet all the shops were closed. The funeral procession was great, and he was interred according to the rites of the Roman Catholic Church. Mr. Kelly's history is a remarkable one. To be a farm servant at twenty-six, and to die at forty-two an honoured medical practitioner amid the mourning of a large population, is an achievement highly creditable at once to his intellect and his heart, and we sympathise with Jarrow in the loss of so useful a man.

DR. R. UVEDALE WEST.

(OF ALFORD, LINCOLNSHIRE.)

THIS gentleman died on Nov. 17th, at the age of sixty years. He was a man who deserves more than a passing notice. Under different circumstances, and with greater opportunities, he was one who would have taken a very high and prominent place in the medical world. As it was, a country practitioner, his time and energies expended in attending patients scattered over a large superficial area, he has achieved for himself a high reputation as a writer, thinker, and acute observer in the department of medicine which absorbed for the most part his mental efforts—viz., the obstetric.

An ancestor of his on the maternal side, Dr. Robert Uvedale, competed successfully with Sir Isaac Newton in 1673 for a Fellowship at Trinity College, Cambridge. His father practised as a surgeon at Alford. In London, where the deceased was educated, his resources were so limited that he was led to increase them by reporting for one of the medical journals Samuel Cooper's lectures on Surgery. Dr. West next went to Paris. The result of his visit was to give him such a practical acquaintance with the French literature and habit of thought that his work was permanently tinged, so to speak, by it in after years. His conversation particularly gave evidence of this. From Paris to the routine of private practice at Hogsthorpe, near Alford, was his next step. Here he began the useful, though comparatively obscure, professional life which has just ended. A few years later, on the death of his father, he removed to Alford, where, for the last two years almost incapacitated by ill health, he ended his days.

It is not too much to say that Dr. Uvedale West was probably one of the most expert practitioners of the obstetric art who has ever lived. In the course of thirty-one years' practice he had attended 3691 cases of labour, preserving accurate notes of the result in each case. His success was very great, not only in expediting labour, but in preserving life. In 1853 he published a "Statistical Account of Obstetric Cases" in the *Association Medical Journal*; in 1862 "Illustrations of Puerperal Diseases," 8vo (Churchill)—a work embodying much valuable and interesting matter and observations relating to the spread and origin of puerperal fever. In 1856 he wrote in the *Glasgow Medical Journal* an article which must always be studied and quoted, "On Cranial Presentations and Cranial Positions." This has since been separately printed. It is a masterly analysis and digest of the facts observed by himself in the course of a long practice, and it is one of the most remarkable pieces of obstetric observation ever published. In the lonely cottage, the farm-house, the country town, Dr. Uvedale West accumulated facts, and made observations of the highest obstetric interest, following in the steps of the great Naegele, inquiring and searching for himself into the hidden facts of nature.

Dr. Uvedale West was a humorous and genial companion, and in an appreciative circle would have shown brightly and happily. His great delight was to escape for a few hours from his arduous practice, and mingle with his brethren in town.

On the establishment of the Obstetrical Society in London in 1858, Dr. Uvedale West immediately became an active contributor, and rendered valuable assistance in the work to which the Society devoted itself. He became a Vice-president of the Society subsequently. The few who knew him will pay an admiring tribute to a true man.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — At an extraordinary meeting of the College on the 19th inst. the following gentlemen were granted licences to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery:—

Air, Alexander Cummings, M.R.C.S., Lorrimore-square.
Evans, Ernest Richard, M.R.C.S., St. Bartholomew's Hospital.
Evans, Samuel, M.R.C.S., Manchester-street.
Hughes, John Howe, M.R.C.S., Gosforth, Carnforth.
Kipling, William, M.R.C.S., Ronaldkirk, Darlington.
Pittock, Francis William, M.R.C.S., Trentham Villas, The Elms, Ramsgate.
Risdon, Alfred, M.R.C.S., Warwick-street.
Saunders, William Egerton, M.R.C.S., Guy's Hospital.
Vasey, Charles Lyon, M.R.C.S., Cavendish place.

UNIVERSITY OF LONDON. — The following is a list of the candidates who have passed the recent B.S. examination for Honours:—

SECOND CLASS.

Carter, Charles Henry, B.A., University College. } Equal.
Parker, Rushton, University College. } Equal.
Stocker, James Reginald, Guy's Hospital.

APOTHECARIES' HALL. — The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Dec. 15th:—

Wade, George Herbert, Plymouth.

As Assistants in Compounding and Dispensing Medicines:—

Fegan, John, Torquay, Devon.
Parker, John Samuel, Peterborough.

The following gentlemen also on the same day passed their first professional examination:—

Maurice S. Duke, George William Graham, and Walter Edward Hacon, Guy's Hospital; Albert Hirst, Manchester; Frederic Skaife, St. Bartholomew's Hospital; John Lloyd Whitmarsh, London Hospital.

UNIVERSITY OF DUBLIN. — The following degrees were conferred on the 14th inst.:—

BACHELOR IN MEDICINE. — Charles Dunscombe Allen, William Thomas Briscoe, Reuben Joshua Harvey, William Hugo Lambert, Henry Marcus Levinge, Alfred Henry Martin, Richard George O'Flaherty, Edw. Albert Rawson, Hatton Smyth, Wm. Henry White, Joseph Wm. Neligan.
MASTER IN SURGERY.—William Thomas Briscoe, Reuben Joshua Harvey, Edward Albert Rawson, Hatton Smyth, William Henry White.
DOCTOR IN MEDICINE.—Robert Thomas Cooper, William Hugo Lambert, G. George Smith, Anthony Traill.

ON Wednesday evening the Kensington Vestry considered the following motion of Mr. Barber, "That this Vestry is dissatisfied with the manner in which the medical officer of health (Dr. F. Godrich) discharges the duties of his office, and unless he forthwith resigns the same, gives him three months' notice of dismissal, such notice to date from the 25th December next." Mr. Gilbert seconded the motion. Mr. Gibbons considered Dr. Godrich should first be heard in his defence as a matter of justice, but the motion was carried.

THE guardians of St. Pancras, having made a redistribution of the medical districts of the parish, and increased the number from six to eight, the following medical officers have been elected from the twenty-nine candidates for the appointments:—No. 1, Mr. Reuben Warn, Highgate-road; No. 2, Dr. Andrew Browne, Bartholomew-road, N.W.; No. 3, Mr. Robert A. W. Westley, Camden-road; No. 4, Dr. J. Thompson, Oakley-square, N.W.; No. 5, Mr. W. Turnbull, Hampstead-road; No. 6, Mr. Walter Smith, William-street, Regent's-park; No. 7, Mr. J. W. Barnes, Gower-street; No. 8, Mr. T. W. Harding, Gray's-inn-road. Of the present medical officers, four were elected, Mr. Claremont withdrew, and Mr. Harley lost his election.

AT a late meeting of the Dispensary Committee of the Castlebar Union, the salary of Dr. C. Walsh was increased from £90 to £110 per annum.

SURGEON-MAJOR F. J. MOUAT, Inspector-General of Gaols, Lower Provinces, Bengal, has been permitted to retire from the service on a pension of £550 per annum. Dr. Mouat is to be succeeded by Dr. Fawcus, Deputy Inspector-General.

GREENOCK MEDICAL SOCIETY.—The following are office-bearers for 1871:—President: Dr. James Wallace. Vice-President: Dr. W. J. Marshall. Secretary: Dr. E. T. Dowie. Treasurer: Dr. W. A. Wilson. Librarian: Dr. John McDougall.

THE dramatic corps of the 13th Surrey Rifle Volunteers gave recently an amateur theatrical entertainment at Guildford, in aid of the funds of the Surrey County Hospital. Upwards of £40 will go into the hospital coffers as the result of this praiseworthy effort.

BRIGHTON DRAINAGE. — The Sewers Board of Brighton have just concluded a contract for the outfall works to the amount of £66,962. The highest tender for the same was no less than £111,757. The works will be commenced immediately.

CHINCHONA PLANTATIONS IN JAVA.—For some years enormous sums of money have been expended by the Dutch Government in the endeavour to produce chinchona bark in Java; but it appears that, so far as can be ascertained, there has been as yet no production of bark fitted for the manufacture of quinine.

BRADFORD MEDICO-CHIRURGICAL SOCIETY. — The members of this Society dined together at the Victoria Hotel, Bradford, on Tuesday, Nov. 29th, 1870, under the presidency of Edward Sugden, M.R.C.S., J. Foster, F.R.C.S., occupying the vice-chair. After the usual loyal and other toasts, R. H. Meade, F.R.C.S., and other members spoke upon professional subjects. The secretary stated that since the formation of the Society in 1863, it had gradually increased in numbers and usefulness. Its monthly meetings were rarely attended by less than one-third of the members, who constituted three-fourths of the profession in the town. The exhibition at the meetings of morbid specimens, of which there was no lack, was becoming most interesting and successful, and had given rise to a pathological department, from which a useful museum might soon be expected. A most agreeable evening was spent by all present, the members and visitors passing mutual congratulations.

DONATIONS, BEQUESTS, &c.—Richard Harvey, Esq., of Greenway, and Torquay, Devon, bequeathed the following amounts (among others), payable on the death of his widow—namely, £4000 to the Royal Hospital for Incurables; £4000 to the Hospital for Paralysis; £4000 to the Hospital for Consumption, Brompton; £3000 to the Cornwall Infirmary; £3000 to the Asylum for Idiots; and £2000 to the Cancer Hospital, Brompton. The Rev. J. H. L. Gabell has sent £1000 to the Board of Cheltenham Hospital, to be applied either towards the erection of a fever infirmary, or to the ordinary funds of the hospital. Charles Stuart, Esq., of London and Bishopstoke, bequeathed £200 each to the Hospital for Sick Children, Great Ormond-street, and the Middlesex Hospital. The Aberdeen Royal Infirmary has become entitled to £500, under the will of Dr. Tawse. Mr. F. A. Schrooter, has given £100 to the Royal Free Hospital "in memory of his son." The Dental Hospital of London has been presented with £21 by the Grocers' Company.

Medical Appointments.

BERRY, W., M.R.C.S.E., has been appointed Medical Officer for District No. 12 of the Wisbeach Union, vice W. J. Tubbs, L.R.C.P.Ed., M.R.C.S.E., deceased.

BOWERS, R. S., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Anstrey District of the Tamworth Union, vice S. Edmonds, M.R.C.S.E., living out of the District.

BURROUGHS, T. J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Crondall District of the Hartley Wintney Union, vice I. J. Gillam, M.D., F.R.C.S.E., resigned.

CAVANAGH, J. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Surgeon to the Main Bridewell, Liverpool, vice A. M'Caul, L.R.C.P.Ed., L.R.C.S.E., deceased.

DONOVAN, D., jun., M.D., L.R.C.S.Ed., has been appointed Medical Officer for the Union Workhouse, Skibbereen, Co. Cork, vice D. Donovan, M.D., L.R.C.S.Ed., retired.

DOUGLAS, W., M.D., L.R.C.S.Ed., has been appointed Deputy Superintendent of the Criminal Lunatic Asylum, Broadmoor, vice Wm. Orange, M.D., M.R.C.P.L., promoted to Resident Medical Superintendent.

FENTON, M. A., M.B.T.C.D., L.M., L.R.C.S.I., has been appointed House-Surgeon to the Coventry and Warwickshire Hospital, vice Dr. O. G. Garland, resigned.

GORNALL, J. H., M.R.C.S.E., has been appointed a Surgeon in Ordinary to the Warrington Dispensary.

HARRIS, A., M.R.C.S.E., has been promoted to Senior Assistant Medical Officer at the Workhouse Infirmary, Manchester, vice J. Westmorland, L.R.C.P.Ed., M.R.C.S.E., appointed Medical Officer for District No. 4.

HOLLAND, J. C., L.K.Q.C.P.I., L.R.C.S.Ed., has been appointed House-Surgeon and Resident Apothecary to the Cork North Charitable Infirmary, vice S. O'Sullivan, M.D., L.R.C.S.E., resigned.

JAMES, P., M.D., M.R.C.P., has been appointed third Physician to the Hospital for Diseases of the Throat, Golden-square.

KNIGHT, C. P., M.R.C.S.E., has been appointed Medical Officer for the Drill District of the Thame Union, vice T. Knight, M.R.C.S.E., deceased.

MACKENZIE, M., M.D., M.R.C.P., has been appointed Senior Physician to the Hospital for Diseases of the Throat, Golden-square, vice Dr. Patrick Fraser, resigned.

MACKINTOSH, A., M.D., of Callington, has been appointed to No. 5 District of the St. Germans Union, Cornwall.

MARSH, J. W., M.R.C.S.E., late Resident Clinical Assistant at Bethlehem Hospital, and formerly House-Surgeon at the London Hospital, has been appointed Assistant Medical Officer at the Lincoln County Asylum, vice W. Douglas, M.D., L.R.C.S.Ed., appointed Deputy Superintendent of the Criminal Lunatic Asylum at Broadmoor.

MILLER, L., L.R.C.P.Ed., L.R.C.S.Ed., &c., has been appointed Medical Officer to the first Trowbridge District, Certifying Surgeon of Factories for Trowbridge, and Surgeon to the Mount Ararat Lodge of Odd Fellows, Trowbridge.

POPE, R. H., L.R.C.P.Ed., L.R.C.S.I., has been re-elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Donegal Dispensary District, and Medical Officer for the Workhouse and Fever Hospital of the Donegal Union.

POPPLEWELL, T. W., M.R.C.S.E., has been appointed Medical Officer for the Bolsover District of the Chesterfield Union, vice H. Moore, M.R.C.S.E., resigned.

ROBERTSON, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer for the Cockermouth No. 2 District of the Cockermouth Union, Cumberland, vice H. Mitchell, M.B., C.M., resigned.

ROE, G. H., M.D., has been appointed a Consulting Physician to the Westminster Hospital.

ROWAN, J. F., L.R.C.P.I., L.R.C.S.I., has been appointed Admiralty Surgeon and Agent for Seafield, Doonbeg, and Freagh-point, vice W. St. John Coleman, L.R.C.P.Ed., L.R.C.S.I., deceased.

SEMPLE, R. H., M.D., M.R.C.P., has been appointed second Physician to the Hospital for Diseases of the Throat, Golden-square.

SKRIMSHIRE, F. W., M.R.C.S.E., has been appointed House-Surgeon to the Morpeth Dispensary, vice Clarkson, resigned.

WALKER, Mr. F. D., has been elected Surgeon-Dentist to the Doncaster Infirmary, vice Mr. A. T. Adams, resigned.

WHIPP, R., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Cadishead District of the Barton-upon-Irwell Union.

Births, Marriages, and Deaths.

BIRTHS.

CLARK.—On the 18th inst., at Cavendish-square, the wife of Dr. Andrew Clark, of a son.

COPE.—On the 19th inst., at Croydon, the wife of W. H. Cope, M.R.C.S.E., of a son.

GOOD.—On the 20th inst., the wife of Dr. J. Good, of Wilton, Wilts, of a daughter.

HUGHES.—On the 15th inst., at Great Mersey-street, Kirkdale, Liverpool, the wife of Ebenezer Hughes, M.D., of a son.

HUTCHINGS.—On the 19th inst., at St. George's House, Canterbury, the wife of H. E. Hutchings, M.R.C.S.E., of a daughter.

ROBBS.—On the 19th inst., at Grantham, the wife of C. H. D. Robbs, Esq., of a daughter.

MARRIAGES.

BELLAMY—LEGG.—On the 15th inst., at St. Peter's, Pimlico, Edward Bellamy, F.R.C.S., to Emilie, youngest daughter of George Legg, Esq., of Westbourne-place, Eaton-square.

MARTLAND—YATES.—On the 15th inst., at St. John's Church, Blackburn, Lancashire, William Martland, M.R.C.S., of St. John's Lodge, Blackburn, youngest son of the late Richard Martland, M.D., and J.P. for the County of Lancaster, to Margaret Elizabeth Yates, of Rockwood, Blackburn, only daughter of William Waddington, Esq., of Bank Cottage, Burnley.—No Cards.

DEATHS.

ALLEN.—On the 11th of July, at Bankipore, of cholera, J. Bedford Allen, Civil Surgeon of Patna, H.M.'s Indian Medical Service, aged 42.

BACON.—On the 7th inst., C. E. Bacon, M.D., M.R.C.S.E., of Guildford, aged 81.

BARKER.—On the 14th inst., W. Barker, M.R.C.S.E., of Malton, Yorkshire, aged 39.

JENKINS.—On the 13th inst., at Cardigan, G. R. Jenkins, M.D., L.R.C.P.Ed., of the British Legation, Japan, formerly Assist.-Surgeon R.N., aged 36.

MILLER.—On the 16th inst., C. Miller, M.R.C.S.E., of Stamford Villas, Fulham, formerly of Great Wakering, aged 74.

PROSSER.—On the 6th inst., T. Prosser, F.R.C.S.E., of Monmouth, aged 59.

WINDER.—On the 7th inst., at Cambridge-terrace, Greenwich, Wm. Winder, M.D., late 49th Regiment, aged 60.

Medical Diary of the Week.

Monday, Dec. 26.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Dec. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling, "On Burning and Unburning." (Juvenile Lectures.)

Wednesday, Dec. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Dec. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling, "On Burning and Unburning." (Juvenile Lectures.)

Friday, Dec. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 31.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling, "On Burning and Unburning." (Juvenile Lectures.)

Notes, Short Comments, and Answers to Correspondents.

THE MILE-END HEALTH OFFICER AND THE LANCET.

A COPY of the *East London Observer* of the 17th instant has been forwarded to us, in which our attention is called to a letter from Dr. Corner to the Clerk to the Board of Guardians, beginning with a reference to "the erroneous report upon small-pox in Mile-end in THE LANCET." Having already explained that this alleged "erroneous report" was founded upon what purported to be Dr. Corner's own statements sent to us for comment, and having given insertion to letters from Dr. Corner and the Clerk to the guardians upon the subject, both amply sufficing to exonerate us from blame, we must protest against being further alluded to by Dr. Corner in the manner above referred to. We believed, at the time, that the newspaper from which we quoted had been sent to us by Dr. Corner himself, and we are still under that impression. This opinion is evidently entertained by the Mile-end guardians, one of whom said at their last meeting that "at all events he (Dr. Corner) could not get rid of the responsibility of having forwarded a copy of the paper containing a report to THE LANCET without correcting the error." The letter of Mr. Southwell, the Clerk to the Board, in our impression of Saturday last, takes the same view. Self-defence compels us now to say that, unless Dr. Corner is prepared to deny that he himself sent us the incorrect report, his attempts to throw the blame off his own shoulders on to ours is a shabby proceeding.

J. R. R.—We clearly see the point of our correspondent's suggestion, who is kind enough to speak of our "very statesmanlike Bill." It is to the effect that men who have been duly examined *in all the branches*, in order to procure one qualification, should be registered as fully qualified. This is quite reasonable in our opinion, and we shall be prepared to support this view.

R. B. M.—It is customary, and perhaps preferable on the whole, for persons similarly circumstanced to our correspondent to style themselves "Mr." He will soon, we presume, be fully entitled to use "Dr."

F.R.C.S., (Infirmary, Derby.)—The notes shall be inserted, if short.

WOMAN'S WORK.

THOSE of our readers who have not already perused a short, sensible article in the current number of *Macmillan's Magazine*, headed "The Modern Revolt," may, we think, do so with advantage. The first point in this modern revolt is the cry of women for leave to work. This, says the writer, is a mere cry, not a cause. There is work for them to do, if they will do it; work waiting for them, and sadly needing their doing. "What they want is a share in that which men have appropriated, and which is undeniably better adapted for men than women." If it be urged, as it sometimes is, that the absence of class distinction among women is owing to the want of education, the writer in *Macmillan* throws the responsibility of it upon mothers who have been perfectly contented to afford their daughters a defective education, denying them what was broad, useful, and sound, for what is flimsy, fashionable, and often flashy. Hold what views we may about extending woman's sphere of action, there can be no doubt that all that concerns domestic and social life is here. After passing in review the duties special to women, and the part in life apportioned to them, and finding nothing brought to its possible perfection, the writer adds: "I cannot say it commends itself to one's calmer judgment that, while their own appointed duties are in such an unsatisfactory state, they should be clamorous to take from men work of an untried character; and which, if men perform only *tant bien que mal*, it cannot be asserted women will perform better." Maternal duties, the tending and educating the young, nursing, cooking, and household cares, the exercise of taste and skill in dressmaking—all these things are discarded now-a-days by women with anything like culture. Ladies have turned their backs on the old treats, and relegated and degraded old duties to lower hands. "But is not the truth something like this—that women crave public applause, an audience, excitement, notoriety, more than mere work?" How many mothers understand the management of the young in any scientific sense? asks the writer on "The Modern Revolt." The cooking question, again, belongs "especially to women, and is quite as important in its own way as the knowledge of drugs and the mixing up of pills." But there is the immense disproportion of the sexes in England! There are not enough men to feed and protect all the women, so that some of them must work for themselves, and protect themselves as well. As they will not work in their own natural portion in the field of labour, and get money and dignity by raising the offices they have degraded to servants, they are clamorous to take the offices of men, and enter into competition with them on their own ground. The writer puts the case exactly as we had done long ago—viz., the inevitable result would be, if they succeed, that the land would be still further drained of men, beaten out of the field by women, who would flood the market with cheaper work, and so ruin men by underselling them. The man is the head of and represents the family, and hence the workman's jealousy is as much for his wife and children as for himself. We are far from saying that no women are fitted to undertake other duties than those which by common consent are consigned to their sex; but we do hold that by far the greater majority of them will best consult their own happiness and the interests of society by developing these to a much greater extent and perfection than have yet been attained before entering upon new and hitherto untried paths, which are already congested by crowds of men competing with one another for employment.

Mr. Robert Grieve.—Our correspondent will have seen that we have closed the discussion of the subject of his letter.

A BED FOR INVALIDS.

To the Editor of THE LANCET.

SIR,—Some three years ago Mr. Hooper made for me a very convenient and useful form of elastic rubber bed, which I have found of so much benefit and comfort to the patients that I feel desirous of bringing its merits under the notice of my brother professionals.

The case it was made to meet was a very common one—an old lady, suffering from incontinence of urine, and passing her fæces under her when in bed. This resulted, spite of all possible care, in a sore back. The difficulties in washing, and the amount of dry linen, flannels, &c., of course there was no end to. I then got Mr. Hooper to construct a bed similar to his water-beds, but half size, having a depressed centre, with an opening of about three to four inches, from which depended a tube, capable of being used from both sides when it was requisite to turn over the bed. Over this a mackintosh sheet was placed, with hole and tube in centre, also this tube being about two feet long, and passing through the centre hole in bed into a receptacle placed under. Above this were two blankets placed longitudinally, and meeting in the middle, so as to be slipped away from either side. The patient by this means was kept constantly dry, and the back quickly healed. When required to be washed, she was gently turned on one side, and the back thoroughly cleansed, and the water was at once conveyed down the tube and into the receptacle, and any quantity could be used without slop. The back was then dried, and clean clothing replaced the foul.

Those having to treat similar cases will fully recognise these advantages. But in hospitals, and especially asylums, where such cases are frequent, I feel sure this kind of bed would prove no small boon.

Your obedient servant,

Shrewsbury, Dec. 11th, 1870. SAM. WOOD.

Mr. R. B. Carr, (Newcastle-on-Tyne.)—No doubt none of the natural excretions can be allowed to stagnate and decompose in dwellings or public places without injury to health; but it is not the case that fever, measles, chicken-pox, and consumption owe a large percentage of their increasing mortality to the exposure of persons to the products of decomposing urea.

A. B. C.—1. The expense would depend upon the character of the outfit; but £50 would probably cover it.—2. The next examination is in February.

EXPERIMENTS WITH BROMAL HYDRATE.

A PAPER, reprinted from the *Glasgow Medical Journal* for last month, on "Bromal Hydrate," by John Dougall, M.B., C.M., gives an account of some experiments made with the above agent on rabbits, frogs, and, to a limited extent, on the human subject. Bromal hydrate strongly resembles chloral hydrate in odour, although it is strongly tinged with that of chlorine. It has an acid reaction, and is decomposed by caustic alkalies into formiate of the base and perbromide of formyle (bromoform), the latter greatly resembling chloroform in its physical properties. Mr. Dougall confesses himself to have been unable to determine satisfactorily whether the anæsthetic and soporific properties of bromoform were equal to those of chloroform, although he is inclined to think that they are not less. Assuming that they are equal, it would appear that in order to obtain the calmative and hypnotic phenomena produced by a given quantity of chloral hydrate (say 25 grains), an equal quantity of bromal hydrate must be given, half the amount of which, as indicated by his experiments, would be productive of highly dangerous, if not fatal consequences. The phenomena evoked by its administration are almost exclusively those of bromine, the penetrating, acrid, and irritating qualities of which are only very partially subdued in the salt. The anæsthesia and hypnosis referred to in the author's experiments with the bromal hydrate on animals were, he thinks, often partial, and probably more apparent than real. Applying to bromal hydrate Liebreich's theory of the evolution of chloroform from chloral hydrate by the alkalies of the blood, it appears that, in the case of a rabbit, twelve grains were required to generate bromoform enough to cause muscular relaxation and drowsiness for about an hour, and that, too, in a small animal, with the bromoform given in a free state, in which condition it might be expected to act with concentrated energy. It seems, therefore, that a dose of bromal hydrate equal at least to a hypnotic dose of chloral hydrate would require to be given to an adult human subject to represent a quantity of bromoform which might be expected theoretically to produce normal sleep—i. e., from twenty-five to thirty grains—an amount that would undoubtedly prove fatal. As the result of his experiments, Mr. Dougall considers that the nearest approximation to the fatal dose of bromal hydrate is in the ratio of one grain to the pound weight both of rabbits and frogs. The manner in which it ultimately destroys life is by its powerful irritant action, intensified by a decided predilection for mucous membranes, rapidly inducing a fatal form of asphyxia. Judging from the results of Mr. Dougall's experiments, it seems improbable that bromal hydrate can ever be used to any great extent in therapeutics; that it will ever rank with chloral hydrate as a hypnotic appears, in the meantime, impossible.

Laramie City.—St. Thomas's Hospital has no power of granting diplomas to medical students, and never had.

THE RATIONALE OF SKIN-GRAFTING.

To the Editor of THE LANCET.

SIR,—In your issue of November 12th are two letters on the subject of Skin-grafting, corroborating the statement of Mr. Couper that the healing process at the margin of an ulcer becomes more active very shortly after engrafted skin has taken root; and in one of these communications, by Dr. Barlow, the explanation is offered that the development of new skin "in the midst of a wide field of granulations leaves to the circumferential cicatrix a greater amount of reparatory force." As this theory seems hardly sufficient fully to account for the facts, may I be allowed to offer a few remarks on the subject.

The more probable explanation appears to be, that the fresh skin developing in the centre of the sore attracts to its vicinity the special ingredients needed for its life, and so enables the margins around to put forth fresh energy. It is a necessary consequence of this proposition that a similar attraction, residing probably in the special cells of the part, must be proved to exist, enabling every organ and tissue of the body to draw to itself the special blood-elements it requires; so that while the skin attracts what may be called "skin-blood," the kidney will attract kidney-blood, the brain, brain-blood, &c.; and though it may seem impossible to admit that blood of various qualities should be circulating at one and the same time in different parts of the body, the arguments adduced below will, I submit, afford grounds for believing that this is the case.

The first I would mention is the change brought about in the circulating fluid in any portion of the body after that part has been wounded. According to Erichsen, this alteration consists "in an increase of the blood's plasticity as it flows," "the last-flowing blood being more coagulable than the first," so that hæmorrhage is more easily arrested than it otherwise would be. In what manner can this be accounted for but by the existence of some beneficent provision under which wounded surfaces can draw to themselves in greater abundance the liquor sanguinis needed for their repair, and so obtain such a quality of blood as they require?

The course of the exanthemata affords a striking example of diverse qualities of blood in different parts of the body. In scarlet fever the vital fluid circulating through the superficial vessels of the face and neck, &c., is sufficiently poisoned on the second day of the disease to cause an inflammatory affection of the skin and throat; but the blood transmitted to the trunk and legs is not adequately charged with the morbid matter till the third and fourth days respectively. So with measles, so with small-pox, so also with typhoid fever: in each of them the diseased blood affects a portion of the body first. But if the fluid traversing the arteries of every region of the body were alike, why should not the poison it contains be transmitted equally in all directions? No difference of structure in different regions which can account for these phenomena has hitherto been described; and even if it existed, such a difference would explain the affection of one region to the exclusion of another much more easily than it would account for priority of attack.

If, however, difference of structure will explain the phases of development of the exanthemata, in what way but by some special quality of blood can the symmetry of diseases, such as psoriasis, be accounted for? In many cases of this disease it is notorious that for every patch on one limb, there is another generated on the opposite limb in a similar position, and this not at one invariable spot for all individuals, but in a great variety of localities. External causes acting simultaneously on both limbs at once cannot invariably be presumed; but the effect is readily interpreted if it can be admitted that similar portions of the body draw from the heart as a common reservoir similar elements of the vital fluid, and so are alike affected when their special nutriment becomes diseased. It may be urged that similar tissues, as their food is identical, may become affected simply by altered quality in the blood, without any determination of the altered fluid to a special part; but this would only explain the phenomena if, in the case of psoriasis, the integument of the whole body were affected.

The increase of a nævus appears explicable only on the same principle. At birth the spot affected is very small; but its enlargement is out of proportion to the growth of the child. Why is this, if not because the tissues, modified by disease, attract to themselves blood of a quality to transform the neighbouring structures into their own condition?

The metastases of diseases, such as gout or erysipelas, from one organ or tissue to a similar but remote one affords an additional argument in favour of some attracting force, drawing to every organ a special kind of blood, in consequence of which diseased blood returned to the heart by one organ may be diverted from its source to a similar organ in another part of the body. The phenomena attending the production of bone by transplanted marrow or periosteum indicate a similar power to obtain the special food that is needed.

It may be urged, however, that in all these cases it is the tissues themselves, by means of their nuclei or germinal matter, which develop the changes above mentioned, without the supply of any special quality of blood for the purpose; and here the operation of skin-grafting, with its results, as noted by Dr. Barlow and Messrs. Couper and Dobson, comes in to promote a correct conclusion. It is undoubtedly true that the minute piece of skin which in this operation is planted in the centre of the sore may increase in size simply by development of its own germinal material; but this will not explain the rapid growth of new integument at the margins of the ulcer, nor can it be clearly seen how, as Dr. Barlow suggests, the development of new skin in the centre leaves greater reparatory force to the margins, unless the explanation now submitted be correct—viz., that the grafted skin in the middle attracts "skin-blood" to the whole sore, and thus, the healing process being intensified both at centre and margins, the raw surface speedily heals up.

The examples of the subordinate currents existing in the ocean and atmosphere, which themselves are the subjects of one general motion, may, I think, be regarded as affording confirmation of the foregoing proposition.

Your obedient servant,

Louth, December 7th, 1870. THOS. WEMYSS BOGG.

To the Editor of THE LANCET.

SIR,—Your last impression contained a letter from Dr. Fiddes, of Aberdeen, on the very interesting subject of Skin-grafting, confirming some remarks I made some weeks since to some of the honorary staff of this hospital.

As soon as the process of so-called skin-grafting appeared in your journal, with the consent of the surgical staff, I set to work. After one or two graftings, I began to think over the *rationale* of this peculiar fact, that skin could be cut out of one place and made to grow in another. This induced me to watch what became of the *true* skin, having, as I thought, lost sight of it, previous to the radiating rays of new skin appearing. On trying thinner pieces, merely taking the cuticle, without drawing blood, I found that the thinner I could get the piece, the quicker radiating rays of new skin formed. At the same time I noticed the hitherto stationary rays of the ulcer began to vigorously extend towards the central island. The fact of the very thin pieces succeeding when the thick failed (the epithelial scales being, I believe, *poisoned* by the breaking up of the old piece of skin) induced me to believe the so-called skin-grafting to be purely epithelial scales growth, and this I stated at the time. The islands of skin appearing in ulcers occasionally can be accounted for, as Dr. Fiddes remarks, this way—an epithelial scale with living nucleus falling on a moist bed. Whether dry epithelial scales (and if dry, dead) will, in the moisture and warmth of an ulcer, take root, and form the centre of a new growth of skin, is questionable. My opinion is that the scales must be fresh—that is, taken from healthy skin after the superficial fluff of dead scales has been removed, so that the nuclei contained in them may take root before they have time to lose the little vitality; then placed on the ulcer, and confined there *in situ* for some days.

I will not go into the subject of the kind of ulcer, constitution, &c., most suitable for epithelial cell-growth, but merely wish to add my testimony to that of Dr. Fiddes.

Your obedient servant,

VACY ASH, M.B., &c.,

December, 1870. Resident Surgeon, Royal Cornwall Infirmary.

THE INSPECTORSHIP OF ANATOMY.

A CONTEMPORARY was at the trouble last week to inform a correspondent that "the rumour had reached the editorial ear that Mr. Charles Hawkins, the Government Inspector of Anatomical Schools in the metropolis, is about to resign that appointment." We are authorised to state that there is no truth in the above rumour.

CONTAGIOUSNESS OF TINEA TONSURANS.

To the Editor of THE LANCET.

SIR,—I perceive that one of your correspondents denies the contagiousness of tinea tonsurans. I cannot agree with him. I have at present under my notice a case where a child of about five years of age came recently to live with some other children. The child was suffering from ringworm in an aggravated form. In a few weeks five of the children in the house became affected. If this is not contagion, perhaps your correspondent will tell me how he would account for the breaking out of the complaint just at that time.

I remain, Sir, yours, &c.,

Hampstead, Dec. 13th, 1870. H. P. DOWNING.

P.S.—I may add that in two of the little patients there was, in addition to the "tonsures" on the scalp, spots of herpes tonsurans on the body; and, furthermore, that liquor epispasticus of the B.P., topically, soon put an end to the disease in every one of the cases.

A YOUNG SMOKER.

A REMARKABLE instance of early acquaintance with the virtues of tobacco was brought under the notice of the Pathological Society on Tuesday evening by Dr. Dickinson, in a boy three years of age, an in-patient of the Children's Hospital in Great Ormond-street. The boy was admitted with marked symptoms of that form of paralysis known as locomotor ataxy, which is extremely rare at an early age, and the peculiarity of his antecedents was that he was an habitual smoker. It appears that he early evinced a remarkable objection to female society, and preferred marching about with his father, who was a gamekeeper, and sharing his comforts, including a short pipe and strong tobacco. When admitted into the hospital, an inquiry into the history of the case elicited the fact of his being a smoker; and on testing his predilection in this respect when in the hospital, he exhibited a proficiency in the art which could have only been acquired by some practice; and he preferred smoking that particular vegetable product which is known to the initiated by the name of "shag."

M.R.C.S., L.R.C.P., (Islington.)—We are unable to say that the treatment of scarlatina by the administration of dilute acetic acid is to be recommended or preferred to other methods.

THE IMPOLICY OF PARSIMONY IN MEDICAL RELIEF.

To the Editor of THE LANCET.

SIR,—A severe epidemic of scarlet fever having recently broken out in one of the districts of the Taunton Union, and several children being down with it, at the Board meeting, a fortnight ago, the medical officer made an application to the guardians for an *ounce of quinine*; but it was refused, only two of the guardians besides the chairman having sufficient intelligence to vote that it should be supplied, the majority holding that to grant such a request would be to establish a *bad precedent*.

Accidentally hearing of this decision of the Board, it occurred to me that it was not improbable that I might find in the history of the Taunton Union something that would confirm the opinion I have advanced as to the relation which subsists between imperfectly cared-for sickness of the working classes and our heavy annual Poor-law expenditure. I therefore turned to the Reports of the Poor-law Board, and find that in 1852 the acreage was 71,194, and the population 35,126. Medical relief at that date was put at £344 10*s.*; gross relief, £12,406 5*s.*, or 7*s.* 1*d.* per head of population. In 1869 the population had become 35,601, or an increase of 475; medical relief is put at £737; whilst gross relief had expanded to £15,597 8*s.* 9*d.*, or 8*s.* 9*d.* per head; the average for England and Wales being 7*s.* 0¼*d.*

These figures, standing alone, would perhaps prove but little. I have therefore, for the purpose of comparison, extracted the statistics of the Kilkenny Union, that of 1869, from the last Report of the Irish Poor-law Commissioners, and with this interesting result. The acreage of this union amounts to 110,943, or 40,000 more; the population to 35,499, or nearly the same. The cost of medical relief amounts to £1238 12*s.* 3*d.*, or £501 more; of this amount, £226 14*s.* 7*d.* is expended in drugs only; whilst gross relief, inclusive of medical relief, cost £3371 19*s.* 9*d.*, or 4*s.* 5*d.* per head. Now, although the expenditure on the poor in this union is considerably more than the average—viz., 2*s.* 11½*d.* in Ireland, I would submit whether the medical and general relief expenditure does not contrast most favourably with this Somersetshire Union, and whether it does not fully bear out the view expressed by one of our most enlightened advocates of Poor-law reform—viz., that the dispensary system, conjoined with sanitary observances and liberal medical arrangements, is the best corrective of the growing pauperism of the country. It is not improbable that the excessive area of this Irish union might explain its comparatively heavier poor relief expenditure. Whether such be the case or not, it is as well here to note that we have in England and Wales 664 districts with either a similar or a vastly larger amount of acreage.

In conclusion, allow me to inform Mr. Goschen that there are eight medical officers in the Taunton, and ten in the Kilkenny Union, so that the disparity in acreage is not so great after all. Yours truly,

Dean-street, December, 1870. JOSEPH ROGERS.

Logic.—1. We do not see that any good would arise from the insertion of our correspondent's letter. The objection is an obvious one, and has been frequently made; but it might be urged in the same way in the case of the generation of animals and plants, and the answer would be that scientifically speaking, we know nothing of the first origin of these.—2. The erection of baths at University College Hospital, if late in the day, will prove very advantageous to the institution.

Dr. Marcet's request shall be attended to.

THE WAR AND THE SCIENTIFIC COLLECTIONS OF PARIS.

THE following memorial is in course of preparation for presentation to Earl Granville by the President and Fellows of the College of Physicians, Ireland:—

Memorial to Her Majesty's Government on the Danger to which the Scientific, Literary, and Art Collections of Paris are now Exposed.

We, the undersigned, President and Fellows of the King and Queen's College of Physicians in Ireland, desire to express our satisfaction with the efforts made by her Majesty's Government to restore peace in Europe, and our earnest hope—shared, we believe, by the nation at large—that these efforts may be eventually successful.

But if, unhappily, our desire should not be realised, your memorialists venture to urge that the interposition of her Majesty's Government may be directed to preserve, if possible, the great scientific, literary, and art collections of Paris, which are, in truth, the property of the whole civilised world.

It is impossible to contemplate calmly the irreparable loss which the destruction of these collections, or even any serious injury to them, would inflict upon students of every nation.

To avert, if possible, such a calamity is now the duty of all; it is more especially the duty of every scientific and literary institution. Your memorialists would, therefore, in the name of our ancient College, earnestly entreat her Majesty's Government to interpose their good offices with the belligerents, for the purpose of saving these matchless treasures from a danger which the fate of the library of Strasburg proves to be only too real.

PHYSICAL EDUCATION OF GIRLS.

WE were present at Madame Brennér's *matinée* at the Crystal Palace on the 17th instant. The pupils perform their exercises to a musical accompaniment, to which they keep time, and thus the monotony inseparable from performing the same motions several times in succession is relieved, if not entirely overcome; while the exercises executed by a number of girls in gymnastic attire of different colours become to the spectator pleasing and effective. It is astonishing how supple the frames of children become with training, and they themselves acquire at the same time a good deal of nerve and dexterity. The idea is a good one, and the systematic physical training of girls will be productive of benefit, provided only that too much be not attempted.

VACCINATION.

To the Editor of THE LANCET.

SIR,—I have just read in your last impression a letter from Dr. Garland on the above subject. Will you allow me, as a Poor-law medical officer and public vaccinator, to make a few comments on it, and to state from experience my opinion of the reasons that vaccination is not properly carried out in the country.

In the first place, I protest against Dr. Garland's argument that every medical man should be a public vaccinator otherwise than as they are now, for this reason, that in country practice the "extras," which include vaccination, &c., are considered the small sinecures of a Poor-law appointment (if one can talk of Poor-law and sinecures in the same breath); and if a man is too proud or too independent to do the dirty work, he ought not to covet the clean; it savours too much of wanting all the "water in one's own ditch." I see Dr. Garland is not a Poor-law medical officer, otherwise he would not have written his letter.

In the second place, vaccination is not considered parochial assistance, and I have failed to observe that respectable people do consider it *infra dig.* to take their children to the public vaccinator, who must have greater facilities for acquiring good matter, &c., than a private practitioner. Numbers of people who are well able to pay their own medical attendant come to me for that reason. Holding as I do a large parish appointment, town and country (the largest, I believe, in the county in which I reside), I ought to be able to form some slight opinion on the subject.

Now as to the reasons that vaccination is not properly carried out in this county and the county of Somerset, for my practice lies in both. I have often observed, and so have others I presume, that when any Game Law or Gun Tax Act is passed, the first infraction of it is visited by the most dire punishment that the law allows. But in the Compulsory Vaccination Act there is no compelling, and even the veriest pauper, if he can drive a carriage-and-four in no other way, can at least drive it through this Act, and does; for, with few exceptions, Boards of Guardians refuse to appoint any public prosecutor, and so an inestimable blessing is neglected or condemned by those who are too ignorant or too bigoted to see its advantages. Dr. Garland's argument regarding their "faith" and nicety of choice proves how little compulsion there is in the matter. Then occasionally an attack of eczema follows vaccination. And what is the consequence? The cry, "Oh, that nasty vaccination!" "Bad matter," &c. &c., *ad libitum*. I often wonder, as this is the alleged cause of all skin diseases, how it comes that the skin was not always free from ailment in our grandmothers' time, before that "bad man" Jenner was born.

To remedy all this, let there only be a few public prosecutors appointed in the provinces, who shall inexorably enforce the law in cases of neglect, and let the different registrars forward to them lists of cases where the operation has not been performed after six months have elapsed from the birth of the child, and we shall soon have no occasion to read such letters as that of Dr. Garland's.

To sum up in a few words. If Government pass a Compulsory Vaccination Act, let Government enforce it, not leave it to the discretion of Boards of Guardians to do or not as they may think fit.—Yours obediently,

December, 1870. JUSTITIA.

To the Editor of THE LANCET.

SIR,—I observe a letter in your last issue on the subject of Vaccination, which I think demands some comment.

In the first place, I had better state that I have been for some years the public vaccinator for seven parishes, as well as parochial surgeon.

Your correspondent, in speaking of the "antipathy" the poorer classes have to the present arrangement, says, "they therefore resort to every dodge to delay or avoid vaccination." In answer to this, I simply state facts as gathered from the registrar. From Sept. 30th, 1868, to Sept. 30th, 1870—a space of two years,—there were in my district 223 registered births, including all classes. Out of this number, 112 have been successfully vaccinated; 21 only were vaccinated by *private* practitioners, 3 went away, and 18 died. As my next quarter for visiting the stations will be the first week in next month, the chances are that the number of unvaccinated children will be, allowances being made of course for any infants that may be ineligible, not more than 5 per cent.

I do not see how the "repugnance to vaccination" is entirely "got over" by *increasing* the number of public vaccinators. What the "stigma" to the operation, when associated with gentlemen who hold parochial appointments, means I cannot understand. Poor-law medical officers rather want backing up by their professional brethren, instead of being made the objects of opprobrium. To show that the parochial surgeons in this neighbourhood are not such "unreliable" operators as represented, I mention the fact that during the last ten years there have been but two compulsory cases brought before the magistrates in the parishes referred to, and in both instances the parents took their children, *not* to a private practitioner, but to my colleague for the No. 1 district, in whom they had "faith."

What is the charm attached to the virus of the private vaccinator to insure immunity from "skin affections," as alluded to by your correspondent? If the selection of lymph is extended to a number of cases, as at a station, it must be preferable, beyond the advantage of arm-to-arm inoculation, to any less limited area afforded by domiciliary operations.

If the Compulsory Vaccination Act is a good Act (which I believe is generally admitted), and there is any necessity of overcoming prejudice or enforcing it, I certainly do not think it would either add to the dignity of a medical man or to his pecuniary interest to alter the present arrangement of prosecutions, which is now undertaken by the guardians.

I remain, Sir, yours faithfully,

Yeovil, December 20th, 1870. FREDK. J. PARSONS.

POOR-LAW APPOINTMENTS.

WE regret to inform *Dr. A. C. Johnston* that merit has very little to do with the appointment of Poor-law medical officers. These appointments are usually given to those gentlemen who have the most personal influence with the guardians, or who are willing to take the appointment on the lowest terms. It is hopeless to obtain any alteration until the proposals of the Poor-law Medical Officers' Association shall be adopted by the Legislature—viz., of placing the appointments in the hands of the central authority, and paying the salaries entirely from the Consolidated Fund. It would then be in the power of the Poor-law Board to institute a system of *concours*, by which merit would be secured a fair place. Such a proposal may possibly emanate from the Sanitary Commission now sitting, as it is more than probable that the Poor-law medical officers will also be constituted deputy officers of health.

THE communications of *Mr. John Dewar*, *Mr. W. R. S. Jefferies*, *Mr. Geo. Thomson*, and *Dr. Broster* shall be inserted in an early number.

ACTION OF CHLORAL HYDRATE.

To the Editor of THE LANCET.

SIR,—As you were kind enough to publish some months ago a few observations of mine on the chloral hydrate, its dose, and utility as a palliative in cancer, perhaps you will permit me now to add that I have remarked that when taken regularly and at the same hour for some weeks by persons afflicted with insomnia, it confers a habit of sleep, and may be dispensed with.

Notwithstanding the indisputable fact that all sedatives, hypnotics, or narcotics, when frequently administered, tend to produce a wish or morbid desire for them, and that chloral may do so equally as the others, and can, like them, be borne in larger quantities by the constitution when accustomed to its action, yet I have come to the conclusion that in the same ratio as opium, when taken many nights without intermission, necessitates its continuance in gradually increased doses, or utter sleeplessness without it, inversely chloral when so exhibited admits of diminished doses, and eventually brings about a habit of sleep without its continued imbibition.

I am, Sir, your obedient servant,

Oughterard, Galway, Dec. 8th, 1870. FRANCIS E. CLARKE, M.B.

A Constant Reader.—The formula asked for was as follows:—A quarter of an ounce of elect gum tragacanth steeped in sixteen ounces of cold water for twenty-four hours—during which time it should be stirred occasionally—yields a fine gelatinous mucilage, which, when mixed in any proportion with cod-liver oil, and simply shaken with it, permanently diffuses the oil into particles, which in vain struggle for reunion. It is usual to mix the mucilage and oil in equal parts, and it is further only required to sweeten, and add as a preservative and savourer to each ounce of the mixture one drachm of a. irits of wine, to which has been added a drop of essence of lemon, the same quantity of essence of almonds, and a trifle of oil of cassia.

Mr. St. Clair Gray, (Glasgow University.)—We will endeavour to give it insertion; but it is desirable that both the facts and the deductions should be expressed as tersely as practicable with a view to their being generally read.

THE WORKSHOPS ACT.

To the Editor of THE LANCET.

SIR,—I hope, in the extension of the Workshops Act to Birmingham, there will not be that glaring inconsistency that is seen in some parts of the country, of strong, healthy-looking young persons, who honestly admit their age to be not quite thirteen years, although standing five feet and upwards, strong and healthy in all appearance and proportions, being refused to be allowed to work ten hours per day, and a diminutive, rickety-looking young person, with his knees slipping round one another as he walks, half the size in bodily appearance, and not able to undergo half the bodily fatigue, standing with a certificate of birth in his hand, be allowed to pass the medical examiner as of ordinary strength and appearance, and fit to be employed in a smelting-house or in front of a furnace for the full number of hours allowed by Act of Parliament. There is something ridiculous in seeing the child-looking one pass to work, and the adult-looking one being refused. I have an impression that the Act was passed to put a stop to working delicate young people to crippling, and not to refuse the strong employment.

I remain, Sir, yours faithfully,

December, 1870. AN OBSERVER.

W. L., (Southam.)—There is no cheap substitute for good port wine in cases where it is considered desirable to prescribe port. Of course other wines may be employed with advantage in a large number of instances; indeed any good wine of pure quality, or brandy and whisky, are preferable to the inferior stuff so often sold as port.

A Subscriber.—We regret that we are unable at present to furnish a reply to our correspondent's question. Scarlatina is so infectious a malady, even where the sanitary arrangements are in no wise defective, that its spread in schools may be easily accounted for.

Ignoramus.—We believe the only condition of studying at the Dental Hospital is the payment of fees. Our correspondent should apply to the Secretary of the hospital for further information.

THE MILITARY AND NAVAL MEDICAL SERVICES.

To the Editor of THE LANCET.

SIR,—I see in your journal of the 10th instant, attention is drawn to the fact that the Director-General of the Medical Department of the Army is desirous of encouraging the study of French and German by the officers of his department.

Now contrast this with the Naval medical service. Some few years ago the Admiralty issued a circular, offering increased pay to certain officers who on examination were found competent to act as interpreters in French, Spanish, or Portuguese; but the only officers allowed to compete were executive officers, marine officers, paymasters, and chief engineers, thus rigidly excluding medical officers.

Your obedient servant,

December 16th, 1870. R.N.

Caution.—There is no satisfactory manual of the duties of medical officers of health. We would advise our correspondent to make an application to the Medical Officer of the Privy Council, who would, no doubt, give him some general instructions as to what his duties are. We think that the Privy Council should issue a manual of instructions as to what public officers of health are required to do; but, failing this, we would recommend the perusal of the various Sanitary Acts and the published Reports of some of our most distinguished officers of health, as, for example, those of Islington, Whitechapel, and St. James, in London; and of Liverpool, Glasgow, Edinburgh, and Dublin, in the provinces.

TRICHINOSIS.

WE give a curious extract from a Tasmanian newspaper of October last:—

"The captain, two mates, and cook of the German immigrant vessel, *Victoria*, that recently arrived at Hobart Town from Hamburg, and also a young girl, who was an intermediate cabin passenger by the same vessel, have, since and before their arrival at this port, been prostrated by a disease called trichinæ, a disease which medical gentlemen resident in Tasmania or in any port of Australia have never before, we believe, had an opportunity of studying. This disease is produced by animalcule obtaining a lodgment in the human body. The animalcule are produced in swine, and a single worm will in a few days propagate thousands, which soon spread through all the animal infected, and no individual partaking of the flesh of the infected animal can escape an attack. The captain believes that he and the other sufferers were infected through eating a portion of ham which they had on board, and which, no doubt, contained some of the larvæ. The worms spread rapidly through the system, and the devastators can be observed in the eyeballs of the mate with the naked eye. The four unfortunate sufferers are now in a fair way of recovery, their medical attendants having treated them on the tentative principle, administering purgatives such as jalap and calomel, followed by spirits of turpentine and benzine."

This paragraph would appear to have been edited by a tear and, we trust and believe, *valued* relative of the late Baron Munchausen, and shows the avidity with which our Australian cousins are likely to accept medical marvels. It is not at all impossible that, on the voyage from Hamburg, certain persons on board the *Victoria* partook of German ham in that half-cooked state so common at German *table d'hôtes*, and it is equally probable that the ham so eaten was infested with embryo trichinæ in the encysted form. Those who ate most freely, or who were so unfortunate as to get the largest quantity of cysts into their digestive organs, naturally suffered from the disease—trichinosis—which caused such ravages on the Continent a short time back. Next comes the Munchausen part of the tale. 1st, the poor pig, who is as much the victim of the migratory pests as man himself, is falsely accused of evolving them from his own *inner consciousness*. Next, it is stated that no individual who partakes of the infested flesh can escape an attack of trichinosis; but it is a well-known fact that thousands of animals have been thus affected without showing any signs of discomfort, and there is also good and sufficient evidence of human beings having been similarly affected without suffering; though, doubtless, when the parasites are very numerous, serious and often fatal consequences have resulted. But what an object for pathologic wonder is the history of the mate's eyeball! These parasites are supposed to exist in the muscles alone. So we suppose that the "naked eye," quoted in our extract, can see in eyeball both muscle and trichinæ! It has never hitherto, we fancy, been quite ascertained what the "naked eyes" of some people are capable of. We reach the limits here of the exceptional visual capacity in the account of the naked eye that detects microscopic cysts in a situation where they never occur!

ERRATUM.—In Mr. Shires' communication on "Fractured Clavicle," published in our last number, page 877, ninth line from bottom of letter, for "external," read *sternal*.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Rolleston, Oxford; Dr. Marcet; Mr. Murray; Mr. Addison; Dr. Maclean, Annan; Mr. Jones, Ashton; Mr. Tatham, Salford; Mr. Whitwell; Dr. Newman, Newport; Mr. Price; Mr. Dewar, Wakering; Mr. T. Wood; Mr. Gregory; Mr. Broomfield; Mr. R. Greene; Dr. Mackintosh, Callington; Dr. Carey; Dr. Thomson, New Pitsligo; Mr. Anderson, Derby; Mr. M'Cree, Belfast; Mr. Edwards, Glasgow; Mr. Duncan; Mr. Wyllie; Mr. Nicholls, Chelmsford; Mr. St. Clair Gray, Glasgow; Mr. Donald; Dr. Brown, Rochester; Dr. Leslie; Mr. Chalmers; Mr. Pearce, Canton; Mr. Doke; Mr. Wallace; Mr. Stansfeld, Bristol; Mr. Sykes, Miltown; Messrs. Johnson and Sons; Dr. Parsons, Hawkshead; Mr. Dunn; Mr. Bankes; Mr. Mackenzie, Perth; Mr. Sarraul; Dr. Young, Portobello; Mr. Butler; Mr. J. V. Solomon, Birmingham; Mr. H. Greenway, Plymouth; Mr. Cathcart, Hornsey-rise; Mr. Grieve, Glasgow; Mr. Lawrence; Dr. Fingrove; Dr. Philipson, Newcastle; Dr. Fehrsen, Dresden; Dr. Eastwood; Mr. Downing; Mr. Prowse, Amersham; Dr. Barkas; Dr. Ross; Mr. Davys; Mr. Harrison; Mr. Carr, Newcastle; Mr. M'Kelvie, Cromer; Mr. Fairhead; Mr. Jones, Bradford; Mr. Marter; Mr. Hutchinson, Norwich; Mr. Gream, Dorking; Mr. Goyder, Bradford; Dr. Miller, Trowbridge; Mr. W. Lattey, Southam; Mr. Taylor; Mr. Street, Epping; Mr. Dolby, Accrington; Dr. Ash, Truro; Dr. Broster, Williton; Dr. Parsons, Yeovil; Mr. Gay; Mr. White; Mr. T. Wynne; Mr. Hobson, Wigan; Dr. Jefferies, Hirwain; Dr. Balbirnie, Sheffield; Mr. Younger; Dr. Hughes, Liverpool; X. Y. Z.; M.D.; A Subscriber; Not a Dispensing Fellow; The Hon. Sec. of the Leamington College; The Secretary of the Royal College of Surgeons, Edinburgh; &c. &c.

East London Observer, *Chorley Standard*, *Colchester Times*, *Chemist and Druggist*, *Jarrow Advertiser*, *Wigan Observer*, *Buckingham Advertiser*, *Shield*, *Yorkshire Advertiser*, *Merthyr Telegraph*, and *Birmingham Daily Examiner* have been received.

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